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(FILE 'HOME' ENTERED AT 16:38:00 ON 30 AUG 2005)

FILE 'REGISTRY' ENTERED AT 16:38:10 ON 30 AUG 2005 E THIOPHENE/CN 5

L11 S E3

E PYRIDINE/CN 5

L2

1 S E3

L3STR

50 S L3 L4

3793 S L3 FUL L5 L6 STR L3

L7STR L6

L8STR L7

L9 STR L8

L10 0 S L9 OR L8 OR L7 OR L6

L1114 S L9 OR L8 OR L7 OR L6 FUL

L12 STR L3

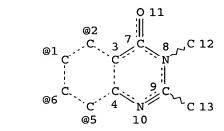
L13 STR L12

L14 STR L13

L15 1 S L14 OR L13 OR L12 18 S L14 OR L13 OR L12 FUL

=> d 15 que stat;d 111 que stat;d 116 que stat;fil medl,biosis,embase,caplus;s 15 or 111 or 116

L3STR



X @14

VPA 14-2/1/6/5 U NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 14

STEREO ATTRIBUTES: NONE

3793 SEA FILE=REGISTRY SSS FUL L3

100.0% PROCESSED 86868 ITERATIONS

SEARCH TIME: 00.00.04

3793 ANSWERS

L6

STR

Prepared by: Mary Hale @2-2507 Rem Bldg 1D86

X @14

@1 C N 3 7 C 8 C 12

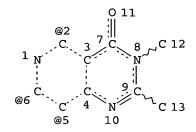
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VPA 14-1/6/5 U NODE ATTRIBUTES: DEFAULT MLEVEL IS ATOM DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES: RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 14

STEREO ATTRIBUTES: NONE L7 STR

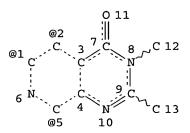


X @14

VPA 14-2/6/5 U NODE ATTRIBUTES: DEFAULT MLEVEL IS ATOM DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES: RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 14

STEREO ATTRIBUTES: NONE L8 STR



X @14

VPA 14-2/1/5 U NODE ATTRIBUTES: DEFAULT MLEVEL IS ATOM DEFAULT ECLEVEL IS LIMITED

Prepared by: Mary Hale @2-2507 Rem Bldg 1D86

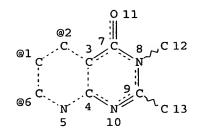
**GRAPH ATTRIBUTES:** 

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 14

STEREO ATTRIBUTES: NONE

L9 STR



X @14

VPA 14-6/1/2 U NODE ATTRIBUTES: DEFAULT MLEVEL IS ATOM DEFAULT ECLEVEL IS LIMITED

**GRAPH ATTRIBUTES:** 

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 14

STEREO ATTRIBUTES: NONE

L11 14 SEA FILE=REGISTRY SSS FUL L9 OR L8 OR L7 OR L6

100.0% PROCESSED 5185 ITERATIONS 14 ANSWERS

SEARCH TIME: 00.00.01

L12 STR

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VPA 14-1/6 U NODE ATTRIBUTES: DEFAULT MLEVEL IS ATOM DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES: RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 13

STEREO ATTRIBUTES: NONE L13 STR

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2 7 C 8 C 12

1 S C 2 7 C 8 C 12

1 S C 2 7 C 8 C 12

1 S C 2 7 C 8 C 12

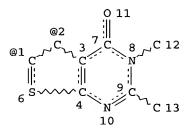
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X @14

VPA 14-2/6 U NODE ATTRIBUTES: DEFAULT MLEVEL IS ATOM DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES: RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 13

STEREO ATTRIBUTES: NONE L14 STR



X @14

VPA 14-2/1 U NODE ATTRIBUTES: DEFAULT MLEVEL IS ATOM DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES: RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 13

STEREO ATTRIBUTES: NONE

L16 18 SEA FILE=REGISTRY SSS FUL L14 OR L13 OR L12

100.0% PROCESSED 2859 ITERATIONS 18 ANSWERS

SEARCH TIME: 00.00.01

COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION

FULL ESTIMATED COST 923.77 923.98

FILE 'MEDLINE' ENTERED AT 16:44:52 ON 30 AUG 2005

FILE 'BIOSIS' ENTERED AT 16:44:52 ON 30 AUG 2005 Copyright (c) 2005 The Thomson Corporation

Prepared by: Mary Hale @2-2507 Rem Bldg 1D86

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Page 5
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COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

L17 0 FILE MEDLINE
L18 2 FILE BIOSIS
L19 6 FILE EMBASE
L20 175 FILE CAPLUS

TOTAL FOR ALL FILES

L21 183 L5 OR L11 OR L16

=> s 121 and (fungicid? or control?(1)mildew? or powder mildew? or bc1 complex or fungal mitochrondrial or sterol biosynthes?)

L22 0 FILE MEDLINE
L23 0 FILE BIOSIS
L24 0 FILE EMBASE
L25 17 FILE CAPLUS

TOTAL FOR ALL FILES

L26 17 L21 AND (FUNGICID? OR CONTROL?(L) MILDEW? OR POWDER MILDEW? OR BC1 COMPLEX OR FUNGAL MITOCHRONDRIAL OR STEROL BIOSYNTHES?)

=> d 1-17 ibib abs hitstr

L26 ANSWER 1 OF 17 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2005:335680 CAPLUS

DOCUMENT NUMBER:

143:19255

TITLE:

3D-QSAR and Molecular Mechanics Study for the Differences in the Azole Activity against Yeastlike and Filamentous Fungi and Their Relation to P450DM Inhibition. 1. 3-Substituted-4(3H)-quinazolinones

AUTHOR(S):

Fratev, Filip; Benfenati, Emilio

CORPORATE SOURCE:

Istituto di Ricerche Farmacologiche Mario Negri,

Milan, 20157, Italy

SOURCE:

Journal of Chemical Information and Modeling (2005),

45(3), 634-644

CODEN: JCISD8; ISSN: 1549-9596

PUBLISHER:

American Chemical Society

DOCUMENT TYPE:

Journal

LANGUAGE:

English

AB A combination between 3D-QSAR and mol. mechanics (MM)-docking study was used as a tool to detail and model the mechanism of action of 46 antifungal azoles. Two methods of alignment of the ligands were performed: (i) alignment of the main skeleton without substituents and (ii) alignment of a defined substructure. The best model is characterized by q2 with the values of 0.70 for yeastlike (yeast), 0.66 for filamentous fungi, and 0.70 for the selectivity against filamentous fungi. 3D-QSAR regression maps derived from six models were used to identify the regions responsible for the differences in the compds. activity against yeast and filamentous fungi. The binding energy of the important substructures (Local Binding Energy-LBE) and its standard deviation were calculated in order

to

demonstrate quant. the contribution of substituents reflecting the

diversity of the antifungal activity. The comparisons of these results with the same regions of the contour maps indicated a good correspondence between the 3D-QSAR and MM (LBE) approaches allowing association between the maps and the participating residues in the active sites of P450DM of C. albicans and A. fumigatus. The  $\pi\text{-}\pi$  interactions of two or more aromatic groups of the ligands with Phe228 and Tyr132 prove to be most important for the differences in activity against C. albicans. In A. fumigatus there was a better occupation of the inner central I-spiral in the areas around the heme. For the activity against A. fumigatus the  $\pi\text{-}\pi$  interactions of aromatic groups of the compds. with Phe509, Phe228, and Tyr132 are significant for the activity.

IT 206350-04-1

RL: PAC (Pharmacological activity); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(3D-QSAR and mol. mechanics study for differences in

3-substituted-4(3H)-quinazolinones activity against yeastlike and filamentous fungi and their relation to P450DM inhibition.)

RN 206350-04-1 CAPLUS

CN 4(3H)-Quinazolinone, 7-chloro-3-[(1R,2R)-2-(2,4-difluorophenyl)-2-hydroxy-1-methyl-3-(1H-1,2,4-triazol-1-yl)propyl]-2-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

REFERENCE COUNT: 57 THERE ARE 57 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L26 ANSWER 2 OF 17 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2005:300395 CAPLUS

DOCUMENT NUMBER: 142:355054

TITLE: Preparation of amide derivatives as inhibitors of

histone deacetylase

INVENTOR(S): Moradei, Oscar; Paquin, Isabelle; Leit, Silvana;

Frechette, Sylvie; Vaisburg, Arkadii; Besterman, Jeffrey M.; Tessier, Pierre; Mallais, Tammy C.

PATENT ASSIGNEE(S): Methylgene, Inc., Can. SOURCE: PCT Int. Appl., 559 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

WO 2005030705 A1 20050407 WO 2004-US31591 20040924
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,

CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG US 2003-505884P 20030924

Ι

PRIORITY APPLN. INFO.:

US 2003-532973P Р 20031229 US 2004-561082P Р 20040409

OTHER SOURCE(S):

MARPAT 142:355054

GI

$$\begin{array}{c|c}
 & R^{1} & R^{2} \\
 & R^{5} & R^{6} & R^{1} & R^{2} \\
 & & R^{1} & R^{2} \\
 & & R^{3} & R^{4} \\
\end{array}$$

AB Title compds. I [Ar1 = (un)saturated-, (un)substituted-mono or fused poly-cyclic hydrocarbyl optionally containing 1-4 heteroatoms per ring; R1 = (un) substituted-mono-, -bi-, -tri-cyclic-aryl or -heteroaryl; R2, R3, and R4 independently = H, halo, amino, etc.; R5 and R6 independently = H, alkyl, aryl, etc.; x = 0-1; Y = any pharmaceutically acceptable chemicalmoiety consisting of 1 to 50 atoms with provisions] and their pharmaceutically acceptable salts, are prepared and disclosed as inhibitors of histone deacetylase. Thus, e.g., II was prepared by Suzuki coupling of 2-bromo-2-nitro-phenylamine (preparation given) with 2-thiopheneboronic acid followed by carbonylation with 4-[3,4-dimethoxy-(phenylamino)methyl]benzoic acid (preparation given) and subsequent reduction The inhibitory

RN

capability of I towards antiproliferative activity of histone deacetylase enzyme was evaluated using 3-[4,5-dimethylthiazol-2-yl-2,5-diphenyltetrazolium] bromide (MTT) assay and it revealed that certain compds. of the invention had MTT IC 50 values in the range of below 1 up to 20  $\mu\text{M}$ . I as histone deacetylase inhibitors should prove useful in the treatment of diseases such as, but not limited to, cell proliferative disease, protozoal disease, and fungal disease.

IT 849237-00-9P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of amide derivs. as inhibitors of histone deacetylase) 849237-00-9 CAPLUS

CN 5-Pyrimidinecarboxamide, 2-[4-[[2-(cyclopentylphenylmethyl)-5-fluoro-4-oxo-3(4H)-quinazolinyl]methyl]-1-piperidinyl]-N-hydroxy- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & & \\$$

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L26 ANSWER 3 OF 17 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2005:300394 CAPLUS

DOCUMENT NUMBER: 142:373563

TITLE: Preparation of amide derivatives as inhibitors of

histone deacetylase

INVENTOR(S): Moradei, Oscar; Paquin, Isabelle; Leit, Silvana;

Frechette, Sylvie; Vaisburg, Arkadii; Besterman,

Jeffrey M.; Tessier, Pierre; Mallais, Tammy C.

PATENT ASSIGNEE(S): Methylgene, Inc., Can. SOURCE: PCT Int. Appl., 389 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIN	KIND DATE				APPL	DATE							
WO 20050307	A1	A1 20050407			1	WO 2	20040924							
W: AE,	AG, A	L, AM,	ΑT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	B₩,	BY,	ΒZ,	CA,	CH,
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GE,	GH, GI	M, HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	ΚP,	KR,	ΚZ,	LC,
LK,	LR, L	S, LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI,
NO,	NZ, O	M, PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,
TJ,	TM, TI	N, TR,	TT,	TZ,	UA,	UG,	US,	UΖ,	VC,	VN,	YU,	ZA,	ZM,	ZW
RW: BW,	GH, GI	M, KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,
AZ,	BY, K	G, KZ,	MD,	RU,	ТJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,

EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,

SN, TD, TG

PRIORITY APPLN. INFO.: US 2003-505884P P 20030924

US 2003-532973P P 20031229 US 2004-561082P P 20040409

OTHER SOURCE(S): MARPAT 142:373563

GI

$$\begin{array}{c|c}
 & R^1 & R^2 \\
 & R^5 & R^3 \\
 & R^6 & X & NH_2 R^4
\end{array}$$

AB Title compds. I [Ar1 = (un)saturated-, (un)substituted-mono or fused poly-cyclic hydrocarbyl optionally containing 1-4 heteroatoms per ring; R1 = (un)substituted-mono-, -bi-, -tri-cyclic-aryl or -heteroaryl; R2, R3, and R4 independently = H, halo, amino, etc.; R5 and R6 independently = H, alkyl, aryl, etc.; x = 0-1; Y = any pharmaceutically acceptable chemical moiety consisting of 1 to 50 atoms with provisions] and their pharmaceutically acceptable salts, are prepared and disclosed as inhibitors of histone deacetylase. Thus, e.g., II was prepared by Suzuki coupling of 2-bromo-2-nitro-phenylamine (preparation given) with 2-thiopheneboronic acid followed by carbonylation with 4-[3,4-dimethoxy-(phenylamino)-methylbenzoic acid (preparation given) and subsequent reduction. The

methyl]benzoic acid (preparation given) and subsequent reduction The inhibitory

capability of I towards antiproliferative activity of histone deacetylase enzyme was evaluated using 3-[4,5-dimethylthiazol-2-yl-2,5-diphenyltetrazolium] bromide (MTT) assay and it revealed that certain compds. of the invention had MTT IC 50 values in the range of below 1 up to 20  $\mu\text{M}$ . I as histone deacetylase inhibitors should prove useful in the treatment of diseases such as, but not limited to, cell proliferative disease, protozoal disease, and fungal disease.

IT 849237-00-9P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of amide derivs. as inhibitors of histone deacetylase)

RN 849237-00-9 CAPLUS

CN 5-Pyrimidinecarboxamide, 2-[4-[[2-(cyclopentylphenylmethyl)-5-fluoro-4-oxo-3(4H)-quinazolinyl]methyl]-1-piperidinyl]-N-hydroxy- (9CI) (CA INDEX NAME)

 $\begin{array}{c|c} & & & \\ & & & \\$ 

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L26 ANSWER 4 OF 17 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:534196 CAPLUS

DOCUMENT NUMBER:

141:89125

TITLE:

Preparation of oxodiazepanylquinazolinones as

modulators of KSP kinesin activity for treatment of

proliferative disease.

INVENTOR(S): Bergnes, Gustave; Dhanak, Dashyant; Knight, Steven

David; Lu, Pu Ping; Morgans, David J., Jr.; Newlander,

Kenneth Allen

PATENT ASSIGNEE(S): Smithkline Beecham Corporation, USA; Cytokinetics

SOURCE:

PCT Int. Appl., 69 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.					KIND DATE			i	APPL	ICAT	ION I		DATE						
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			EG,	GD,	GE,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KΡ,	KR,	LC,	LK,	LŔ,	LT,	
			LV,	MA,	MG,	MK,	MN,	MX,	NO,	NZ,	OM,	PH,	PL,	RO,	SC,	SG,	TN,	TT,	
			UA,	US,	UZ,	VN,	YU,	$z_{A}$											
		RW:	BW,	GH,	GM,	KΕ,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	ΑZ,	
			BY,	KG,	ΚZ,	MD,	RU,	ТJ,	TM,	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	
			ES,	FI,	FR,	GB,	GR,	HU,	IE,	IT,	LU,	MC,	NL,	PT,	RO,	SE,	SI,	SK,	
			TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG
PRIORITY APPLN. INFO.:								1	JS 20	002-4	4334	94 P	P 20021213						
						τ	JS 20	002-4	4350	]	P 20021219								
OTUED COIDCE/C).					MADDAT 141.00126														

OTHER SOURCE(S): MARPAT 141:89125

GT

Title compds. [I; R1-R4 = H, halo, OH, NO2, cyano, (substituted) alkyl, alkoxy, aryl, heteroaryl, etc.; R5, R51 = H, (substituted) alkyl, aryl, aralkyl, heteroaryl, heteroaralkyl; R5R51C = 3-7 membered carbocyclyl; R6 = H, (substituted) alkyl, aryl, aralkylo, heteroaryl, heteroaralkyl; R7, R71, R8, R81, R9, R91 = H, (substituted) alkyl, aryl, aralkyl, heteroaryl, heteroaralkyl; X, Y = CR10R11, NR12, O, S; R10, R11 = H, (substituted) alkyl, aryl, heteroaryl; R12 = H, (substituted) alkyl, aralkyl, heteroaralkyl, alkylcarbonyl, arylcarbonyl, heteroarylcarbonyl, aralkylcarbonyl, heteroaralkylcarbonyl, alkoxycarbonyl, etc.], were prepared Thus, N-(2-aminoethyl)-N-[1-(3-benzyl-7-chloro-4-oxo-3,4-dihydroquinazolin-2-yl)-2-methylpropyl]acrylamide (preparation given) was refluxed overnight in MeOH to give 3-benzyl-7-chloro-2-[2-methyl-1-(7-oxo-1,4-diazepan-1-yl)propyl]-3H-quinazolin-4-one. Some I inhibited cell proliferation with GI50 <10 nM.

IT 713526-19-3P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses) (claimed compound; preparation of oxodiazepanylquinazolinones as modulators

of

CN

KSP kinesin activity)

RN 713526-19-3 CAPLUS

4(3H)-Quinazolinone, 7-chloro-2-[1-(hexahydro-7-oxo-1H-1,4-diazepin-1-yl)-2-methylpropyl]-3-(phenylmethyl)- (9CI) (CA INDEX NAME)

IT 713526-20-6P 713526-21-7P 713526-22-8P 713526-23-9P 713526-24-0P 713526-25-1P 713526-26-2P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES

(claimed compound; preparation of oxodiazepanylquinazolinones as modulators

of

KSP kinesin activity)

RN 713526-20-6 CAPLUS

CN 4(3H)-Quinazolinone, 7-chloro-2-[1-(hexahydro-4-methyl-7-oxo-1H-1,4-diazepin-1-yl)-2-methylpropyl]-3-(phenylmethyl)- (9CI) (CA INDEX NAME)

RN 713526-21-7 CAPLUS

CN 4(3H)-Quinazolinone, 7-chloro-2-[(1R)-1-(hexahydro-7-oxo-1H-1,4-diazepin-1-yl)-2-methylpropyl]-3-(phenylmethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 713526-22-8 CAPLUS

CN 5H-1,4-Diazepin-5-one, 1-acetyl-4-[1-[7-chloro-3,4-dihydro-4-oxo-3-(phenylmethyl)-2-quinazolinyl]-2-methylpropyl]hexahydro- (9CI) (CA INDEX NAME)

RN 713526-23-9 CAPLUS

CN 4(3H)-Quinazolinone, 7-chloro-2-[1-(hexahydro-3,3-dimethyl-7-oxo-1H-1,4-diazepin-1-yl)-2-methylpropyl]-3-(phenylmethyl)- (9CI) (CA INDEX NAME)

RN 713526-24-0 CAPLUS

CN 4(3H)-Quinazolinone, 7-chloro-2-[1-[hexahydro-7-oxo-4-(phenylmethyl)-1H-1,4-diazepin-1-yl]-2-methylpropyl]-3-(phenylmethyl)- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} \text{Cl} & \text{i-Pr} & \text{O} \\ & \text{N} & \text{CH} - \text{N} \\ & \text{CH}_2 - \text{Ph} \\ & \text{CH}_2 - \text{Ph} \end{array}$$

RN 713526-25-1 CAPLUS

CN 4(3H)-Quinazolinone, 7-chloro-2-[1-(hexahydro-7-oxo-1H-1,4-diazepin-1-yl)propyl]-3-(phenylmethyl)- (9CI) (CA INDEX NAME)

RN 713526-26-2 CAPLUS

CN 4(3H)-Quinazolinone, 7-chloro-2-[1-(hexahydro-6,6-dimethyl-7-oxo-1H-1,4-diazepin-1-yl)-2-methylpropyl]-3-(phenylmethyl)- (9CI) (CA INDEX NAME)

IT 336119-88-1 383192-89-0 713526-39-7

RL: RCT (Reactant); RACT (Reactant or reagent)

Prepared by: Mary Hale @2-2507 Rem Bldg 1D86

(preparation of oxodiazepanylquinazolinones as modulators of KSP kinesin activity)

RN 336119-88-1 CAPLUS

CN 4(3H)-Quinazolinone, 2-(1-amino-2-methylpropyl)-7-chloro-3-(phenylmethyl)-(9CI) (CA INDEX NAME)

RN 383192-89-0 CAPLUS

CN 4(3H)-Quinazolinone, 2-(1-bromopropyl)-7-chloro-3-(phenylmethyl)- (9CI) (CA INDEX NAME)

RN 713526-39-7 CAPLUS

CN Carbamic acid, [2-[[(1R)-1-[7-chloro-3,4-dihydro-4-oxo-3-(phenylmethyl)-2-quinazolinyl]-2-methylpropyl]amino]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

TT 713526-27-3P 713526-28-4P 713526-29-5P 713526-30-8P 713526-31-9P 713526-32-0P

713526-33-1P 713526-34-2P 713526-35-3P 713526-36-4P 713526-37-5P 713526-38-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of oxodiazepanylquinazolinones as modulators of KSP kinesin activity)

RN 713526-27-3 CAPLUS

CN Carbamic acid, [2-[[1-[7-chloro-3,4-dihydro-4-oxo-3-(phenylmethyl)-2-quinazolinyl]-2-methylpropyl]amino]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{NH-CH}_2\text{-CH}_2\text{-NH-C-OBu-t} \\ \text{Cl} \\ \text{N} \\ \text{CH-Pr-i} \\ \text{CH}_2\text{-Ph} \\ \text{O} \end{array}$$

RN 713526-28-4 CAPLUS

CN Carbamic acid, [2-[[1-[7-chloro-3,4-dihydro-4-oxo-3-(phenylmethyl)-2-quinazolinyl]-2-methylpropyl](1-oxo-2-propenyl)amino]ethyl]-,
1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

RN 713526-29-5 CAPLUS

CN 2-Propenamide, N-(2-aminoethyl)-N-[1-[7-chloro-3,4-dihydro-4-oxo-3-(phenylmethyl)-2-quinazolinyl]-2-methylpropyl}- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} \text{CH}_2\text{--}\text{CH}_2\text{--}\text{NH}_2\\ \hline \text{O}\\ \hline \text{N--}\text{C--}\text{CH}\text{---}\text{CH}_2\\ \hline \text{CH--}\text{Pr--}\text{i}\\ \hline \text{O}\\ \hline \text{CH}_2\text{--}\text{Ph}\\ \hline \text{O}\\ \end{array}$$

RN 713526-30-8 CAPLUS

CN Carbamic acid, [2-[[(1R)-1-[7-chloro-3,4-dihydro-4-oxo-3-(phenylmethyl)-2-quinazolinyl]-2-methylpropyl](1-oxo-2-propenyl)amino]ethyl]-,
1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

$$H_2C$$
 $N$ 
 $R$ 
 $Pr-i$ 
 $OBu-t$ 
 $OBu-t$ 

RN 713526-31-9 CAPLUS

CN 2-Propenamide, N-(2-aminoethyl)-N-[(1R)-1-[7-chloro-3,4-dihydro-4-oxo-3-(phenylmethyl)-2-quinazolinyl]-2-methylpropyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

$$H_2N$$
 $R$ 
 $Pr-i$ 
 $Ph$ 

RN 713526-32-0 CAPLUS

CN Carbamic acid, [2-[[1-[7-chloro-3,4-dihydro-4-oxo-3-(phenylmethyl)-2-quinazolinyl]-2-methylpropyl](1-oxo-2-propenyl)amino]-1,1-dimethylethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

RN 713526-33-1 CAPLUS

CN 2-Propenamide, N-(2-amino-2-methylpropyl)-N-[1-[7-chloro-3,4-dihydro-4-oxo-3-(phenylmethyl)-2-quinazolinyl]-2-methylpropyl]- (9CI) (CA INDEX NAME)

RN 713526-34-2 CAPLUS

CN Carbamic acid, [2-[[1-[7-chloro-3,4-dihydro-4-oxo-3-(phenylmethyl)-2 quinazolinyl]propyl]amino]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA
 INDEX NAME)

$$\begin{array}{c} \text{NH-CH}_2\text{-CH}_2\text{-NH-C-OBu-t} \\ \text{Cl} \\ \text{CH-Et} \\ \text{CH}_2\text{-Ph} \\ \text{O} \end{array}$$

RN 713526-35-3 CAPLUS

CN Carbamic acid, [2-[[1-[7-chloro-3,4-dihydro-4-oxo-3-(phenylmethyl)-2-quinazolinyl]propyl](1-oxo-2-propenyl)amino]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{CH}_2\text{--}\text{CH}_2\text{--}\text{NH}\text{--}\text{C}\text{--}\text{OBu-t} \\ \\ \text{O} \\ \\ \text{N}\text{--}\text{C}\text{--}\text{CH}\text{---}\text{CH}_2 \\ \\ \text{C}\text{--}\text{CH}\text{---}\text{Et} \\ \\ \text{CH}_2\text{--}\text{Ph} \\ \\ \text{O} \end{array}$$

RN 713526-36-4 CAPLUS

Prepared by: Mary Hale @2-2507 Rem Bldg 1D86

CN 2-Propenamide, N-(2-aminoethyl)-N-[1-[7-chloro-3,4-dihydro-4-oxo-3-(phenylmethyl)-2-quinazolinyl]propyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} \text{CH}_2-\text{CH}_2-\text{NH}_2\\ & \text{O}\\ & \text{II}\\ & \text{N-C-CH} \end{array}$$

RN 713526-37-5 CAPLUS

CN Carbamic acid, [2-[[1-[7-chloro-3,4-dihydro-4-oxo-3-(phenylmethyl)-2-quinazolinyl]-2-methylpropyl](3-chloro-2,2-dimethyl-1-oxopropyl)amino]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{CH}_2\text{--}\text{CH}_2\text{--}\text{NH}\text{--}\text{C}\text{--}\text{OBu-t} \\ \text{O} \text{ Me} \\ \text{O} \text{ Me} \\ \text{N}\text{--}\text{C}\text{--}\text{C}\text{--}\text{CH}_2\text{C}1 \\ \text{Me} \\ \text{Cl} \\ \text{N} \\ \text{CH}\text{--}\text{Pr}\text{--}\text{i} \\ \text{O} \\ \end{array}$$

RN 713526-38-6 CAPLUS

CN Propanamide, N-(2-aminoethyl)-3-chloro-N-[1-[7-chloro-3,4-dihydro-4-oxo-3-(phenylmethyl)-2-quinazolinyl]-2-methylpropyl]-2,2-dimethyl- (9CI) (CA INDEX NAME)

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L26 ANSWER 5 OF 17 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

2003:563066 CAPLUS

DOCUMENT NUMBER:

139:117435

TITLE:

Preparation of 3,4-dihydroquinazolin-4-one derivatives

as fungal efflux pump inhibitors

INVENTOR(S):

Watkins, Will J.; Lemoine, Remy; Cho, Aesop; Renau,

Thomas E.

PATENT ASSIGNEE(S):

Essential Therapeutics, Inc., USA

SOURCE:

U.S., 29 pp. CODEN: USXXAM

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6596723	B1	20030722	US 2001-906864	20010716
US 2003220338	A1	20031127	US 2002-243074	20020912
US 2003229097	A1	20031211	US 2002-334755	20021230
US 6689782	B2	20040210		
PRIORITY APPLN. INFO.:			US 2001-906864 A2	20010716
			US 2002-243074 A2	20020912
OTHER SOURCE(S):	MARPAT	139:117435		

GI

AB This invention relates to compds. represented by general formula [I; L1 = a single bond, C1-4 alkylene; R1 = (un)substituted C3-7 heteroalicyclic

Prepared by: Mary Hale @2-2507 Rem Bldg 1D86

IT

RN

CN

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containing 1 nitrogen atom and 0 to 2 addnl. heteroatoms independently
selected from the group consisting of nitrogen, oxygen and sulfur,
-Cx2NHC(:NH)Cx3, -Cx2NCx3C(:NH)Cx13, -Cx2NHC(:0)Cx3; L2 = C0, S02, C(0)0,
CONH, CONCx5, C(S)NH, C(S)NCx5, C(NH)NH, C(NH)NCx5, S(O)2NH, S(O)2NCx5; R2
= (un)substituted aryl, C1-4 alkyl; R3 = (un)substituted aryl; R4 = C1-4
alkyl; R5, R6, R7, R8 = H, halo, -Cx12, -O(x12)0-; Cx2, Cx3, Cx5,
Cx12, and Cx13 are independent (C1-C4)alkyl; the absolute stereochem. of
centers of asymmetry may be independently R or S] or, pharmaceutically
acceptable salts thereof. These compds. are efflux pump inhibitors and
therefore are useful as potentiators of anti-fungal agents for the
treatment of infections caused by fungi that employ an efflux pump
resistance mechanism. Thus, 3.0 g 2-amino-5-chlorobenzamide and 2.5 mL
propionic anhydride were mixed and stirred at 90° under nitrogen
for 20 min, treated with aqueous sodium hydroxide (2 M, 36 mL), and refluxed
for 1 h to give 100% 6-chloro-2-ethyl-3,4-dihydroquinazolin-4-one (II).
II (1.0 g) and 1.58 g N-(2-bromoethyl)phthalimide were dissolved in 50 mL
DMF, treated with freshly crushed K2CO3, and stirred at 70° for 24
h to give 36% 6-chloro-2-ethyl-3-(2-phthalimidoethyl)-3,4-
dihydroquinazolin-4-one which (0.66 q) was brominated by Br in AcOH at
60° for 2 h to give 69% 2-(1-bromoethyl)-6-chloro-3-(2-
phthalimidoethyl)-3,4-dihydroquinazolin-4-one (III). III (0.71 g) and
0.26 g 2,4-dimethoxyaniline were dissolved in 20 mL DMF, treated with
freshly crushed K2CO3, and stirred at 80° for 16 h to give
2-[1-(3,4-dimethoxyphenyl)ethyl]-6-chloro-3-(2-phthalimidoethyl)-3,4-
dihydroquinazolin-4-one which (0.46 g) was dissolved in 5 mL
1,2-dichloroethane, treated with 0.12 mL Ph isocyanate, and stirred at
40° for 16 h to give 66% N-[1-[6-Chloro-3-[2-(1,3-dioxo-1,3-
dihydroisoindol-2-yl)ethyl]-4-oxo-3,4-dihydroquinazolin-2-yl]ethyl]-N-(2,4-
dimethoxyphenyl)-N'-phenylurea (IV). IV showed MPC8 (concentration of efflux
pump inhibitor necessary to reduce the fluconazole MIC 8-fold) of
≤0.03 µg/mL against C. albicans vs. MIC (concentration of fluconazole
alone that causes a 80% inhibition the growth/proliferation of fungal
cells) of 16 \muq/mL.
562836-17-3P, N-[1-[6-Chloro-3-[2-(1,3-dioxo-1,3-dihydroisoindol-2-
yl)ethyl]-4-oxo-3,4-dihydroquinazolin-2-yl]ethyl]-N-(2,4-dimethoxyphenyl)-
N'-phenylurea 562836-21-9P, N-[2-[6-Chloro-2-[1-[N'-(4-
chlorophenyl) -N-(2,4-dimethoxyphenyl) ureido] ethyl] -4-oxo-4H-quinazolin-3-
yl]ethyl]acetamidine
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
   (preparation of 3,4-dihydroquinazolin-4-one derivs. as fungal efflux pump
   inhibitors and potentiators of antifungal agents for treating
   infections caused by fungi employing efflux pump resistance mechanism)
562836-17-3 CAPLUS
Urea, N-[1-[6-chloro-3-[2-(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)ethyl]-
3,4-dihydro-4-oxo-2-quinazolinyl]ethyl]-N-(2,4-dimethoxyphenyl)-N'-phenyl-
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(9CI) (CA INDEX NAME)

RN 562836-21-9 CAPLUS

CN Ethanimidamide, N-[2-[6-chloro-2-[1-[[(4-chlorophenyl)amino]carbonyl](2,4-dimethoxyphenyl)amino]ethyl]-4-oxo-3(4H)-quinazolinyl]ethyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & \text{OMe} \\ &$$

IT 562836-28-6P, 6-Chloro-2-ethyl-3-(2-phthalimidoethyl)-3,4-dihydroquinazolin-4-one 562836-29-7P, 2-(1-Bromoethyl)-6-chloro-3-(2-phthalimidoethyl)-3,4-dihydroquinazolin-4-one 562836-30-0P 562836-31-1P 562836-32-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of 3,4-dihydroquinazolin-4-one derivs. as fungal efflux pump inhibitors and potentiators of antifungal agents for treating infections caused by fungi employing efflux pump resistance mechanism)

RN 562836-28-6 CAPLUS

CN 1H-Isoindole-1,3(2H)-dione, 2-[2-(6-chloro-2-ethyl-4-oxo-3(4H)-quinazolinyl)ethyl]- (9CI) (CA INDEX NAME)

RN 562836-29-7 CAPLUS

CN 1H-Isoindole-1,3(2H)-dione, 2-[2-[2-(1-bromoethyl)-6-chloro-4-oxo-3(4H)-quinazolinyl]ethyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & \\ & & \\ \text{C1} & & \\ &$$

RN 562836-30-0 CAPLUS

CN 1H-Isoindole-1,3(2H)-dione, 2-[2-[6-chloro-2-[1-[(2,4-dimethoxyphenyl)amino]ethyl]-4-oxo-3(4H)-quinazolinyl]ethyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{Me} \\ \text{CH-NH} \\ \text{OMe} \\ \text{O} \\ \text{$$

RN 562836-31-1 CAPLUS

CN Urea, N-[1-[6-chloro-3-[2-(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)ethyl]-3,4-dihydro-4-oxo-2-quinazolinyl]ethyl]-N'-(4-chlorophenyl)-N-(2,4-dimethoxyphenyl)- (9CI) (CA INDEX NAME)

RN 562836-32-2 CAPLUS

Urea, N-[1-[3-(2-aminoethyl)-6-chloro-3,4-dihydro-4-oxo-2-CN quinazolinyl]ethyl]-N'-(4-chlorophenyl)-N-(2,4-dimethoxyphenyl)- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & \text{OMe} \\ &$$

REFERENCE COUNT:

THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L26 ANSWER 6 OF 17 CAPLUS COPYRIGHT 2005 ACS on STN

4

ACCESSION NUMBER: 2002:862253 CAPLUS

DOCUMENT NUMBER: 139:292216

TITLE: Synthesis and antimicrobial activity of some pyrazoline derivatives of 4(3H)-quinazolinones.

[Erratum to document cited in CA138:153499]

Panda, J.; Srinivas, S. V.; Rao, M. E. Bhanoji; Panda, AUTHOR (S):

C. S.

CORPORATE SOURCE: Roland Institute of Pharmaceutical Sciences,

Berhampur, 760 010, India Journal of the Indian Chemical Society (2002), 79(10), SOURCE:

853

CODEN: JICSAH; ISSN: 0019-4522

PUBLISHER: Indian Chemical Society

DOCUMENT TYPE: Journal LANGUAGE: English

AB The corrected version of the structure diagram on page 770 is given.

IT 496050-61-4P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL

(Biological study); PREP (Preparation)

(prepn of disubstituted pyrazoline derivs. of 4(3H)-quinazolinones from

2-substituted benzoxazinones and their antimicrobial activity

(Erratum))

496050-61-4 CAPLUS RN

3H-Pyrazol-3-one, 2-[4-[(6,8-dibromo-2-methyl-4-oxo-3(4H)-CN quinazolinyl)methyl]benzoyl]-2,4-dihydro-5-methyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & & \\ & &$$

#### IT 496050-67-0P 496050-72-7P 496050-77-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn of disubstituted pyrazoline derivs. of 4(3H)-quinazolinones from 2-substituted benzoxazinones and their antimicrobial activity (Erratum))

RN 496050-67-0 CAPLUS

CN Benzoic acid, 4-[(6,8-dibromo-2-methyl-4-oxo-3(4H)-quinazolinyl)methyl]-(9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ & &$$

RN 496050-72-7 CAPLUS

CN Benzoic acid, 4-[(6,8-dibromo-2-methyl-4-oxo-3(4H)-quinazolinyl)methyl]-, ethyl ester (9CI) (CA INDEX NAME)

RN 496050-77-2 CAPLUS

CN Benzoic acid, 4-[(6,8-dibromo-2-methyl-4-oxo-3(4H)-quinazolinyl)methyl]-, hydrazide (9CI) (CA INDEX NAME)

L26 ANSWER 7 OF 17 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2002:775314 CAPLUS

DOCUMENT NUMBER: 138:153499

TITLE: Synthesis and antimicrobial activity of some

pyrazoline derivatives of 4(3H)-quinazolinones

AUTHOR(S): Panda, J.; Srinivas, S. V.; Rao, M. E. Bhanoji; Panda,

c.s.

CORPORATE SOURCE:

Roland Institute of Pharmaceutical Sciences,

Berhampur, 760 010, India

SOURCE:

Journal of the Indian Chemical Society (2002), 79(9),

770-771

CODEN: JICSAH; ISSN: 0019-4522

PUBLISHER:

Indian Chemical Society

DOCUMENT TYPE:

Journal

LANGUAGE:

English

OTHER SOURCE(S):

CASREACT 138:153499

The present communication describes the synthesis and antimicrobial

activity of some new 6,8-disubstituted-2-(phenyl/methyl)-3-[(4-(3-methyl-5pyrazolinon-1-yl)carbonyl)phenyl/benzyl/methyl]-4(3H)-quinazolinones.

496050-61-4P IT

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL

(Biological study); PREP (Preparation)

(prepn of disubstituted pyrazoline derivs. of 4(3H)-quinazolinones from

2-substituted benzoxazinones and their antimicrobial activity)

496050-61-4 CAPLUS RN

3H-Pyrazol-3-one, 2-[4-[(6,8-dibromo-2-methyl-4-oxo-3(4H)-CN

quinazolinyl)methyl]benzoyl]-2,4-dihydro-5-methyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & & \\ & &$$

496050-67-0P 496050-72-7P 496050-77-2P IT

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn of disubstituted pyrazoline derivs. of 4(3H)-quinazolinones from 2-substituted benzoxazinones and their antimicrobial activity)

RN 496050-67-0 CAPLUS

Benzoic acid, 4-[(6,8-dibromo-2-methyl-4-oxo-3(4H)-quinazolinyl)methyl]-CN (CA INDEX NAME)

$$Br$$
 $N$ 
 $N$ 
 $CH_2$ 
 $CO_2H$ 

496050-72-7 CAPLUS RN

Benzoic acid, 4-[(6,8-dibromo-2-methyl-4-oxo-3(4H)-quinazolinyl)methyl]-, CN ethyl ester (9CI) (CA INDEX NAME)

RN 496050-77-2 CAPLUS

CN Benzoic acid, 4-[(6,8-dibromo-2-methyl-4-oxo-3(4H)-quinazolinyl)methyl]-,
hydrazide (9CI) (CA INDEX NAME)

REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L26 ANSWER 8 OF 17 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2000:860678 CAPLUS

DOCUMENT NUMBER: 134:157195

TITLE: Synthesis and antifungal activity of some new

quinazoline and benzoxazinone derivatives

AUTHOR(S): Shalaby, Alyaa A.; El-Khamry, Abdel Momen A.; Shiba,

S. A.; Ahmed, Abdel Aal Alm Eldeen Abdalah; Hanafi,

Awaref A.

CORPORATE SOURCE: Chemistry Department, Faculty of Science, Ain Shams

University, Cairo, Egypt

SOURCE: Archiv der Pharmazie (Weinheim, Germany) (2000),

333(11), 365-372

CODEN: ARPMAS; ISSN: 0365-6233

PUBLISHER: Wiley-VCH Verlag GmbH

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 134:157195

AB The hitherto unknown 2-isopropyl-6,8-dibromo-4H-3,1-benzoxazin-4-one was subjected to condensation with either primary or secondary amines affording the benzamide derivs., while with alcs. in presence of the base, corresponding esters were obtained. A series of other compds. were also prepared according to the methods discussed in the text. Ten of our compds. were examined against Sclerotium cepivorum as well as Botrytis allii on PDA media. These compds. showed a significant reduction of mycelial growth and scleratia number of these fungi which cause the white rot and neck rot diseases of onion.

IT 325707-16-2P 325707-17-3P

RL: SPN (Synthetic preparation); PREP (Preparation)
 (synthesis and antifungal activity of new quinazoline and benzoxazinone derivs.)

RN 325707-16-2 CAPLUS

CN 4(3H)-Quinazolinone, 6,8-dibromo-3-(2-hydroxyethyl)-2-(1-methylethyl)-(9CI) (CA INDEX NAME)

RN 325707-17-3 CAPLUS

CN 4(3H)-Quinazolinone, 6,8-dibromo-3-(2-chloroethyl)-2-(1-methylethyl)-(9CI) (CA INDEX NAME)

REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L26 ANSWER 9 OF 17 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1999:647356 CAPLUS

DOCUMENT NUMBER: 132:64230

TITLE: Synthesis of some new heterocyclic systems containing

6,8-dichloro-2-ethyl-4(3H)-quinazolinone derivatives

as antimicrobial agents

AUTHOR(S): Ibrahim, M. K.

CORPORATE SOURCE: Dept. of Pharmaceutical Chemistry, Faculty of

Pharmacy, Al-Azhar University, Cairo, Egypt

SOURCE: Al-Azhar Journal of Pharmaceutical Sciences (1998),

21, 98-103

CODEN: AAJPFT; ISSN: 1110-1644

PUBLISHER: Al-Azhar University, Faculty of Pharmacy

DOCUMENT TYPE: Journal LANGUAGE: English

GΙ

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB Condensation of benzoxazinone I (X = O) with Et glycinate hydrochloride gave I (X = NCH2COOEt), which was converted to I (X = NCH2CONHNH2). The latter reacted with acetic acid and sodium acetate to afford triazino[4,3-c]quinazolinone II. Reaction of I (X = NCH2CONHNH2) with p-substituted benzaldehydes gave the corresponding hydrazones. Thiazolidinones III (R = H, Cl, F, Me, OH) and oxadiazolines IV (same R)

were obtained by cyclocondensation of the hydrazones with mercaptoacetic acid and acetic acid, resp. Some of the newly synthesized compds. showed significant antimicrobial activity.

252962-15-5P 252962-16-6P 252962-18-8P IT

252962-20-2P 252962-21-3P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(preparation and antimicrobial activity of)

252962-15-5 CAPLUS RN

3(4H)-Quinazolineacetamide, 6,8-dichloro-2-ethyl-N-[2-(4-methylphenyl)-4-CNoxo-3-thiazolidinyl]-4-oxo- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ &$$

252962-16-6 CAPLUS RN

3(4H)-Quinazolineacetamide, 6,8-dichloro-2-ethyl-N-[2-(4-hydroxyphenyl)-4-CN oxo-3-thiazolidinyl]-4-oxo- (9CI) (CA INDEX NAME)

$$C1$$
 $N$ 
 $Et$ 
 $N$ 
 $CH_2-C-NH-N$ 
 $S$ 

252962-18-8 CAPLUS RN

CN 1,3,4-Oxadiazole, 3-acetyl-2-(4-chlorophenyl)-5-[(6,8-dichloro-2-ethyl-4oxo-3(4H)-quinazolinyl)methyl]-2,3-dihydro- (9CI) (CA INDEX NAME)

RN 252962-20-2 CAPLUS

CN 1,3,4-Oxadiazole, 3-acetyl-5-[(6,8-dichloro-2-ethyl-4-oxo-3(4H)-quinazolinyl)methyl]-2,3-dihydro-2-(4-methylphenyl)- (9CI) (CA INDEX NAME)

RN 252962-21-3 CAPLUS

CN 1,3,4-Oxadiazole, 3-acetyl-5-[(6,8-dichloro-2-ethyl-4-oxo-3(4H)-quinazolinyl)methyl]-2,3-dihydro-2-(4-hydroxyphenyl)- (9CI) (CA INDEX NAME)

$$C1$$
 $N$ 
 $Et$ 
 $O$ 
 $N$ 
 $AC$ 
 $O$ 
 $O$ 
 $O$ 
 $O$ 

IT 252962-03-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

Prepared by: Mary Hale @2-2507 Rem Bldg 1D86

(Reactant or reagent)

(preparation and conversion to hydrazide)

RN 252962-03-1 CAPLUS

CN 3(4H)-Quinazolineacetic acid, 6,8-dichloro-2-ethyl-4-oxo-, ethyl ester (9CI) (CA INDEX NAME)

IT 252962-04-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and cyclization or condensation with aromatic aldehydes)

RN 252962-04-2 CAPLUS

CN 3(4H)-Quinazolineacetic acid, 6,8-dichloro-2-ethyl-4-oxo-, hydrazide (9CI) (CA INDEX NAME)

$$C1$$
 $N$ 
 $Et$ 
 $CH_2-C-NH-NH_2$ 

IT 252962-06-4P 252962-08-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and reaction with mercaptoacetic acid or acetic anhydride)

RN 252962-06-4 CAPLUS

CN 3(4H)-Quinazolineacetic acid, 6,8-dichloro-2-ethyl-4-oxo-, (phenylmethylene)hydrazide (9CI) (CA INDEX NAME)

$$C1$$
 $N$ 
 $Et$ 
 $O$ 
 $CH_2-C-NH-N=CH-Ph$ 

RN 252962-08-6 CAPLUS

CN 3(4H)-Quinazolineacetic acid, 6,8-dichloro-2-ethyl-4-oxo-, [(4-fluorophenyl)methylene]hydrazide (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} C1 & \text{Et} & \text{O} \\ N & \text{CH}_2 - \text{C-NH-N} = \text{CH} \end{array}$$

IT 252962-12-2P 252962-13-3P 252962-14-4P

252962-17-7P 252962-19-9P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of) N 252962-12-2 CAPLUS

RN 252962-12-2 CAPLUS
CN 3(4H)-Quinazolineacetamide, 6,8-dichloro-2-ethyl-4-oxo-N-(4-oxo-2-phenyl-3-thiazolidinyl)- (9CI) (CA INDEX NAME)

RN 252962-13-3 CAPLUS

CN 3(4H)-Quinazolineacetamide, 6,8-dichloro-N-[2-(4-chlorophenyl)-4-oxo-3-thiazolidinyl]-2-ethyl-4-oxo- (9CI) (CA INDEX NAME)

RN 252962-14-4 CAPLUS

CN 3(4H)-Quinazolineacetamide, 6,8-dichloro-2-ethyl-N-[2-(4-fluorophenyl)-4-oxo-3-thiazolidinyl]-4-oxo- (9CI) (CA INDEX NAME)

RN 252962-17-7 CAPLUS

CN 1,3,4-Oxadiazole, 3-acetyl-5-[(6,8-dichloro-2-ethyl-4-oxo-3(4H)-quinazolinyl)methyl]-2,3-dihydro-2-phenyl- (9CI) (CA INDEX NAME)

$$C1$$
 $N$ 
 $Et$ 
 $CH_2$ 
 $N$ 
 $AC$ 
 $Ph$ 

RN 252962-19-9 CAPLUS

CN 1,3,4-Oxadiazole, 3-acetyl-5-[(6,8-dichloro-2-ethyl-4-oxo-3(4H)-quinazolinyl)methyl]-2-(4-fluorophenyl)-2,3-dihydro- (9CI) (CA INDEX NAME)

IT 252962-07-5P 252962-09-7P 252962-11-1P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent) (preparation, antimicrobial activity, and reaction with mercaptoacetic acid or acetic anhydride)

RN 252962-07-5 CAPLUS

CN 3(4H)-Quinazolineacetic acid, 6,8-dichloro-2-ethyl-4-oxo-, [(4-chlorophenyl)methylene]hydrazide (9CI) (CA INDEX NAME)

RN 252962-09-7 CAPLUS

CN 3(4H)-Quinazolineacetic acid, 6,8-dichloro-2-ethyl-4-oxo-, [(4-methylphenyl)methylene]hydrazide (9CI) (CA INDEX NAME)

$$C1$$
 $N$ 
 $Et$ 
 $O$ 
 $N$ 
 $CH_2-C-NH-N$ 
 $CH$ 

RN 252962-11-1 CAPLUS

CN 3(4H)-Quinazolineacetic acid, 6,8-dichloro-2-ethyl-4-oxo-, [(4-hydroxyphenyl)methylene]hydrazide (9CI) (CA INDEX NAME)

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L26 ANSWER 10 OF 17 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1999:216904 CAPLUS

DOCUMENT NUMBER: 130:252368

TITLE: Preparation of novel pyrimidin-4-ones and

pyrimidine-4-thiones as fungicides

INVENTOR(S):
Walter, Harald

PATENT ASSIGNEE(S): Novartis A.-G., Switz.; Novartis-Erfindungen

Verwaltungsgesellschaft m.b.H.

SOURCE: PCT Int. Appl., 89 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

IT

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WO	9914					WO 1998-EP5790													
WO	9914																		
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																		KG,	
		KP,	KR,	KZ,	LC,	LK,	LR,	LS,	LT,	LU	J,	LV,	MD,	MG,	MK,	MN	, MW	MX,	
		NO,	NZ,	PL,	PT,	RO,	RU,	SD,	SE,	SC	3,	SI,	SK,	SL,	ТJ,	TM	, TR	TT,	
							YU,												
	RW:																		
		FI,	FR,	GB,	GR,	IE,	IT,	LU,	MC,	NI	٠, د	PT,	SE,	BF,	ВJ,	CF	, CG	CI,	
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AU	AU 9897429				A1 19990405				AU 1998-97429							19980910			
AU	7437	17			B2		2002	0131											
EP	7437 1015	434			A2		2000	0705		EΡ	19	98-	9513	80			19980	910	
																		PT,	
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TR	2000	0071	3		T2		2000	0821		TR	20	000-	2000	00713	3		19980	910	
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US	6277	858			B1		2001	0821		US	20	00-	5083	07			20000	309	
PRIORITY	APP	LN.	INFO	.:													19970	912	
										WO	19	98-1	EP579	90		W 19980910			
OTHER SO	OURCE	(S):			MARI	TAS	130:	25236	68										
CT																			

GI

$$R^1$$
 $R^3$ 
 $R^3$ 
 $R^4$ 
 $R^4$ 

The title compds. [I; A = Ph, thienyl, thiazolyl, pyridyl, pyridazinyl; X AΒ = O, S; R1 = H, halo, Me3Si; R2 = H, halo, Me3Si; at least one of R1 and R2 is not H; R3 = (un)substituted C1-8 alkyl, C1-8 alkenyl, C1-8 alkynyl, etc.; R4 = (un)substituted C1-8 alkyl, C1-8 alkenyl, C1-8 alkynyl, etc.] which have plant-protective properties and are suitable for protecting plants against infestation by phytopathogenic microorganisms, in particular fungi, were prepared E.g., a few-step synthesis of thienopyrimidine II, which showed especially strong efficacy against Podosphaera

leucotricha on apple shoots at 0.06% a.i. (spray mixture), was given. 215928-31-7P 221451-40-7P 221451-41-8P

RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of novel pyrimidin-4-ones and pyrimidine-4-thiones as

fungicides)

RN215928-31-7 CAPLUS

Thieno[3,2-d]pyrimidin-4(3H)-one, 7-bromo-2-butyl-3-propyl- (9CI) (CA CN INDEX NAME)

221451-40-7 CAPLUS RN

CN4(3H)-Quinazolinone, 6-bromo-2-butyl-3-propyl- (9CI) (CA INDEX NAME)

RN221451-41-8 CAPLUS

CN Pyrido[2,3-d]pyrimidin-4(3H)-one, 6-bromo-2-butyl-3-propyl- (9CI) (CA INDEX NAME)

L26 ANSWER 11 OF 17 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1998:742228 CAPLUS

DOCUMENT NUMBER: 130:11542

TITLE: Preparation of thienopyrimidines as fungicides

INVENTOR (S): Atherall, John Frederick; Hough, Thomas Lawley;

Lindell, Stephen David; O'Mahony, Mary Josephine;

Saville-Stones, Elizabeth Anne

PATENT ASSIGNEE(S):

SOURCE: PCT Int. Appl., 40 pp.

CODEN: PIXXD2

Agrevo Uk Ltd., UK

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

> PATENT NO. KIND DATE APPLICATION NO. DATE

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WO 9849899
                                19981112
                                             WO 1998-GB1286
                          A1
                                                                     19980501
            AU, BR, CA, CN, CZ, HU, ID, IL, JP, KR, MX, PL, RO, RU, TR, UA,
             US, VN
         RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
             PT, SE
     CA 2288735
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                                 19981112
                                             CA 1998-2288735
                                                                     19980501
     AU 9872249
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                                 19981127
                                             AU 1998-72249
                                                                     19980501
     AU 733531
                          B2
                                 20010517
     EP 982992
                          A1
                                 20000308
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                                20000704
                                             BR 1998-9598
                                                                    19980501
     JP 2001524121
                          T2
                                20011127
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                                                                     19980501
     AT 224643
                          E
                                20021015
                                             AT 1998-919374
                                                                     19980501
     ES 2179489
                          Т3
                                20030116
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                          Т
     PT 982992
                                20030131
                                             PT 1998-919374
                                                                     19980501
     IL 132474
                          A1
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                                             IL 1998-132474
                                                                     19980501
     US 6432964
                          B1
                                20020813
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                                                                     19991105
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                          Α
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                                                                    19991108
     US 6541630
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                                             US 2002-172891
                                                                    20020613
PRIORITY APPLN. INFO.:
                                             GB 1997-9210
                                                                 A 19970508
                                             GB 1997-24328
                                                                 A 19971118
                                             GB 1997-24849
                                                                 Α
                                                                    19971126
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                                                                 Α
                                                                    19971126
                                             GB 1997-24854
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                                                                    19971126
                                             WO 1998-GB1286
                                                                 W 19980501
                                             US 1999-423135
                                                                 A3 19991105
OTHER SOURCE(S):
                         MARPAT 130:11542
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$$R^4$$
 $R^2$ 
 $R^3$ 
 $R^2$ 

GI

RN

The thienopyrimidines I [R1 = H, hydroxy, acyl, acyloxy, (un) substituted amino, etc.; R2 = H, (un) substituted alkyl alkenyl or alkynyl, etc.; Z = O or S; M = thiophene ring; R3, R4 = R2, (un) substituted amino, halo, cyano, nitro, etc.; R3R4 together with the atoms to which they are attached form an (un) substituted carbocyclic or heterocyclic ring] and related compds. are prepared as agrochem. fungicides.

IT 215927-49-4P 215928-21-5P 215928-22-6P 215928-28-2P 215928-29-3P 215928-30-6P 215928-31-7P

Ι

215927-49-4 CAPLUS

CN Thieno[3,2-d]pyrimidin-4(3H)-one, 7-bromo-3-[(4-chlorophenyl)methyl]-2-ethyl- (9CI) (CA INDEX NAME)

RN 215928-21-5 CAPLUS

CN Thieno[3,2-d]pyrimidin-4(3H)-one, 7-bromo-2,3-dimethyl- (9CI) (CA INDEX NAME)

RN 215928-22-6 CAPLUS

CN Thieno[3,2-d]pyrimidin-4(3H)-one, 7-bromo-2-ethyl-3-methyl- (9CI) (CA INDEX NAME)

RN 215928-28-2 CAPLUS

CN Thieno[3,2-d]pyrimidin-4(3H)-one, 7-bromo-2-ethyl-3-[(4-methoxyphenyl)methyl]- (9CI) (CA INDEX NAME)

RN 215928-29-3 CAPLUS

CN Thieno[3,2-d]pyrimidine-3(4H)-acetonitrile, 7-bromo-2-ethyl-4-oxo- (9CI) (CA INDEX NAME)

RN 215928-30-6 CAPLUS

CN Thieno[3,2-d]pyrimidin-4(3H)-one, 7-bromo-3-[2-(3,4-dichlorophenyl)-2oxoethyl]-2-ethyl- (9CI) (CA INDEX NAME)

RN 215928-31-7 CAPLUS

CN Thieno[3,2-d]pyrimidin-4(3H)-one, 7-bromo-2-butyl-3-propyl- (9CI) (CA INDEX NAME)

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L26 ANSWER 12 OF 17 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1998:424091 CAPLUS

DOCUMENT NUMBER: 129:95502

TITLE: Preparation of fungicidal quinazolinones

INVENTOR(S): Bellina, Russell Frank; Bereznak, James Francis;

Christensen, Joel Robert; Chang, Zen-Yu; Fawzi, Maged Mohamed; Marshall, Eric Allen; Moberg, William Karl; Rorer, Morris Padgett; Sternberg, Charlene Gross; Walker, Michael Paul; Zimmerman, William Thomas

PATENT ASSIGNEE(S): E. I. Du Pont de Nemours & Co., USA

SOURCE: PCT Int. Appl., 78 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

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PATENT NO.
                                KIND
                                         DATE
                                                        APPLICATION NO.
      _____
                                ----
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                                                         -----
                                                      WO 1997-US22779
      WO 9826664
                                 A1
                                         19980625
                                                                                       19971215
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                ID, IL, IS, JP, KG, KP, KR, KZ, LC, LK, LR, LT, LV, MD, MG, MK,
           MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, SL, TJ, TM, TR, TT, UA, US, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG
      AU 9853803
                                         19980715
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                                 A1
                                                                                       19971215
                                                         EP 1997-950927
      EP 946095
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                                         19991006
                                                                                       19971215
           R: CH, DE, FR, GB, IT, LI
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                                                         JP 1998-527831
                                                                                       19971215
PRIORITY APPLN. INFO.:
                                                         US 1996-33657P
                                                                                  P 19961217
                                                         US 1997-41964P
                                                                                  P 19970403
                                                                                  W 19971215
                                                         WO 1997-US22779
OTHER SOURCE(S):
                               MARPAT 129:95502
GI
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$$\begin{array}{c|c}
R^{3} & O & R^{1} \\
\hline
R^{19}_{p} & N & WR^{2}
\end{array}$$

```
AB
     The title compds. [I; R3 = Cl, Br, I, Cl-8 alkyl, etc.; R4 = H, Cl, Br, I,
     etc.; when R3 and R4 are on adjacent atoms they can be OC(R16)20; W = O,
     S, SO, etc.; Q = O, S; R1 = C1-10 alkyl, C3-6 cycloalkyl, C3-10
     cycloalkenyl, etc.; R2 = C1-10 alkyl, C3-7 cycloalkyl, C3-10 cycloalkenyl, etc.; R16 = H, halo, C1-4 alkyl, C1-6 haloalkyl; R19 = Cl, Br, I], useful
     for controlling plant diseases caused by fungal plant pathogens, were
     prepared Thus, treatment of 6-iodo-3-n-propyl-2-thio-4(3H)-quinazolinedione
     with phosgene in Pr acetate afforded I [R1 = n-Pr; W = direct bond; R2 =
     Cl; R3 = 6-I; R4 = R19 = H] which showed 99% control against Erysiphe
     graminis f. sp. tritici at 200 ppm.
IT
     209603-93-0P 209603-95-2P 209604-00-2P
     209604-01-3P 209604-02-4P 209604-03-5P
     209604-05-7P 209604-06-8P 209604-07-9P
     209604-08-0P 209604-09-1P 209604-10-4P
     209604-11-5P 209604-12-6P 209604-30-8P
     209604-31-9P 209604-32-0P 209604-40-0P
     209604-47-7P
     RL: AGR (Agricultural use); BAC (Biological activity or effector, except
     adverse); BSU (Biological study, unclassified); SPN (Synthetic
     preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
        (preparation of fungicidal quinazolinones)
RN
     209603-93-0 CAPLUS
CN
     4(3H)-Quinazolinone, 6-bromo-2,3-dipropyl- (9CI) (CA INDEX NAME)
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RN 209603-95-2 CAPLUS

CN 4(3H)-Quinazolinone, 6-iodo-2,3-dipropyl- (9CI) (CA INDEX NAME)

RN 209604-00-2 CAPLUS

CN 4(3H)-Quinazolinone, 6-iodo-2-methyl-3-propyl- (9CI) (CA INDEX NAME)

RN 209604-01-3 CAPLUS

CN 4(3H)-Quinazolinone, 2-(ethoxymethyl)-6-iodo-3-propyl- (9CI) (CA INDEX NAME)

RN 209604-02-4 CAPLUS

CN 4(3H)-Quinazolinone, 2-(chloromethyl)-6-iodo-3-propyl- (9CI) (CA INDEX NAME)

RN 209604-03-5 CAPLUS

CN 4(3H)-Quinazolinone, 6-iodo-3-propyl-2-[[(tetrahydro-2furanyl)methoxy]methyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
 & \text{CH}_2 - \text{O} - \text{CH}_2 \\
\hline
 & \text{Pr-n}
\end{array}$$

RN 209604-05-7 CAPLUS

CN 4(3H)-Quinazolinone, 6-iodo-2-(4-morpholinylmethyl)-3-propyl- (9CI) (CA INDEX NAME)

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RN 209604-06-8 CAPLUS

CN 4(3H)-Quinazolinone, 6-iodo-2-[(methylsulfonyl)methyl]-3-propyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & & \\ & &$$

RN 209604-07-9 CAPLUS

CN 4(3H)-Quinazolinone, 6-iodo-3-propyl-2-[(propylamino)methyl]- (9CI) (CA INDEX NAME)

RN 209604-08-0 CAPLUS

CN 4(3H)-Quinazolinone, 3-(cyclopropylmethyl)-2-(ethoxymethyl)-6-iodo-(9CI) (CA INDEX NAME)

RN 209604-09-1 CAPLUS
CN 4(3H)-Quinazolinone, 2-(ethoxymethyl)-6-iodo-3-[(tetrahydro-2-furanyl)methyl]- (9CI) (CA INDEX NAME)

RN 209604-10-4 CAPLUS CN 4(3H)-Quinazolinone, 2-[(cyclopropylmethoxy)methyl]-6-iodo-3-propyl- (9CI) (CA INDEX NAME)

RN 209604-11-5 CAPLUS CN 4(3H)-Quinazolinone, 2-(chloromethyl)-3-(cyclopropylmethyl)-6-iodo- (9CI) (CA INDEX NAME)

RN 209604-12-6 CAPLUS
CN 4(3H)-Quinazolinone, 2-(chloromethyl)-6-iodo-3-[(tetrahydro-2-furanyl)methyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & &$$

RN 209604-30-8 CAPLUS

CN Propanedioic acid, (6-chloro-3,4-dihydro-4-oxo-3-propyl-2-quinazolinyl)-, dimethyl ester (9CI) (CA INDEX NAME)

RN 209604-31-9 CAPLUS

CN Propanedinitrile, (6-chloro-3,4-dihydro-4-oxo-3-propyl-2-quinazolinyl)- (9CI) (CA INDEX NAME)

RN 209604-32-0 CAPLUS

CN 2-Quinazolineacetic acid, 6-chloro-α-cyano-3,4-dihydro-4-oxo-3propyl-, methyl ester (9CI) (CA INDEX NAME)

RN 209604-40-0 CAPLUS

CN 4(3H)-Quinazolinone, 6-chloro-3-(1-methylethyl)-2-(trifluoromethyl)- (9CI) (CA INDEX NAME)

RN 209604-47-7 CAPLUS

CN 4(3H)-Quinazolinone, 2-(1-ethylbutyl)-6-iodo-3-propyl- (9CI) (CA INDEX NAME)

REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L26 ANSWER 13 OF 17 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1998:269995 CAPLUS

DOCUMENT NUMBER: 128:303693

TITLE: New Azole Antifungals. 3. Synthesis and Antifungal

Activity of 3-Substituted-4(3H)-quinazolinones

AUTHOR(S): Bartroli, Javier; Turmo, Enric; Alguero, Monica;

Boncompte, Eulalia; Vericat, Maria L.; Conte, Lourdes;

Ramis, Joaquim; Merlos, Manuel; Garcia-Rafanell,

Julian; Forn, Javier

CORPORATE SOURCE: Research Center, J. Uriach Cia. S.A., Barcelona,

08026, Spain

Ι

SOURCE: Journal of Medicinal Chemistry (1998), 41(11),

1869-1882

CODEN: JMCMAR; ISSN: 0022-2623

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal LANGUAGE: English

GI

AB A series of azole antifungal agents featuring a quinazolinone nucleus have been subjected to studies of structure-activity relationships. In general, these compds. displayed higher in vitro activities against filamentous fungi and shorter half-lives than the structures described in our preceding paper. The most potent products in vitro carried a halogen (or an isostere) at the 7-position of the quinazolinone ring. Using a murine model of systemic candidosis, oral activity was found to be dependent on hydrophobicity, which, in turn, modulated the compound's

half-life. The 7-Cl derivative, (1R,2R)-7-chloro-3-[2-(2,4-difluorophenyl)-2hydroxy-1-methyl-3-(1H-1,2,4-triazol-1-yl)propyl]quinazolin-4(3H)-one [I, UR-9825], was selected for further testing due to its high in vitro activity, low toxicity, good pharmacokinetic profile, and ease of obtention. Compound I is the (1R,2R) isomer of four possible stereoisomers. The other three isomers were also prepared and tested. The enantiomer (1S,2S) and the (1R,2S) epimer were inactive, whereas the (1S,2R) epimer retained some activity. In vitro, I was superior to fluconazole, itraconazole, SCH-42427, and TAK-187 and roughly similar to voriconazole and ER-30346. In vivo, I was only moderately active in a mouse model of systemic candidosis when administration was limited to the first day. This was attributed to its short half-life in that species (t1/2 = 1 h)po). Protection levels comparable to or higher than those of fluconazole, however, were observed in systemic candidosis models in rat and rabbit, where the half-life of the compound was found to be 6 and 9 h, resp. Finally, I showed excellent protection levels in an immunocompromised rat model of disseminated aspergillosis. The compound showed low toxicity signs when administered to rats at 250 mg/kg qd or at 100 mg/kg bid during 28 days.

IT 206350-04-1P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(synthesis and antifungal activity of 3-substituted-4(3H)-

quinazolinones)

RN 206350-04-1 CAPLUS

CN 4(3H)-Quinazolinone, 7-chloro-3-[(1R,2R)-2-(2,4-difluorophenyl)-2-hydroxy-1-methyl-3-(1H-1,2,4-triazol-1-yl)propyl]-2-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L26 ANSWER 14 OF 17 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1989:530542 CAPLUS

DOCUMENT NUMBER:

111:130542

TITLE:

Synthesis and screening of some newer

6,8-dichloro-2-methyl-3-(substituted)-4(3H)-

quinazolinones as antimicrobial agents

AUTHOR(S): Mohamed, Y

Mohamed, Y. A.; Ammar, Y. A.; El-Sharief, A. M. S.;

Ahmed, H.

CORPORATE SOURCE:

Fac. Sci., Al-Azhar Univ., Nasr, Egypt

SOURCE:

Proceedings of the Indian National Science Academy,

Part A: Physical Sciences (1989), 55(1), 87-95

CODEN: PIPSBD; ISSN: 0370-0046

DOCUMENT TYPE:

Journal

LANGUAGE:

English

OTHER SOURCE(S):

CASREACT 111:130542

GT

I,  $R=C_6H_4SO_2NHR^2$ ,  $R^1=Me$ 

II, R=NHCOCH2Cl, R1=Me

III,  $R=NHCOCH_2NHR^2$ ,  $R^1=Me$ 

IV,  $R=NH_2$ ,  $R^1=Me$ 

V, R = N = CHAr,  $R^1 = Me$ 

VI, R=N=CHAr,  $R^1=CH=CHAr$ 

VII, R=CH2COCl, R1=Me

VIII, R=CH2CONHR2, R1=Me

IX, R=4-oxo-2H-3, 1-benzoxazinylmethyl,  $R^1=Me$ 

6,8-Dichloro-2-methyl-3-(4-N-substituted sulfonamidophenyl)-4(3H)-AB quinazolinones (I, R2 = H, or heterocyclic or NHR2 = quanidino) were prepared by reaction of 6,8-dichloro-2-methyl-2H-3,1-benzoxazin-4-one with sulfonamides. Also, II was prepared and condensed with amines to give III (R2 = iso-Bu, CH2Ph, C6H4OMe-4, or sulfonamido group). Condensation of IV with aldehydes under different conditions gave V and VI. VII underwent condensation with amines to give VIII (R2 = aromatic or sulfonamido group). Cyclization of VIII(R2 = C6H4CO2H-2) with Ac2O gave IX. Some of these compds. showed antimicrobial activity.

122417-92-9P 122417-93-0P 122417-94-1P IT 122417-95-2P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(preparation and antimicrobial activity of)

RN122417-92-9 CAPLUS

3(4H)-Quinazolineacetic acid, 6,8-dichloro-2-methyl-4-oxo- (9CI) CNINDEX NAME)

$$C1$$
 $N$ 
 $N$ 
 $CH_2-CO_2H$ 

RN122417-93-0 CAPLUS

CN3(4H)-Quinazolineacetamide, 6,8-dichloro-2-methyl-4-oxo-N-[4-[(2-

thiazolylamino)sulfonyl]phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ & &$$

RN 122417-94-1 CAPLUS

CN 3(4H)-Quinazolineacetamide, 6,8-dichloro-2-methyl-4-oxo-N-[4-[(2-pyridinylamino)sulfonyl]phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ & &$$

RN 122417-95-2 CAPLUS

CN 3(4H)-Quinazolineacetamide, 6,8-dichloro-2-methyl-4-oxo-N-[4-[(2-pyrimidinylamino)sulfonyl]phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ & &$$

IT 122418-03-5P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and cyclization of)

RN 122418-03-5 CAPLUS

CN Benzoic acid, 2-[[(6,8-dichloro-2-methyl-4-oxo-3(4H)-quinazolinyl)acetyl]amino]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} C1 & \text{Me} & \text{O} \\ \hline N & \text{CH}_2 - \text{C} - \text{NH} \\ \hline \end{array}$$

IT 40889-51-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and hydrolysis of)

RN 40889-51-8 CAPLUS

CN 3(4H)-Quinazolineacetic acid, 6,8-dichloro-2-methyl-4-oxo-, ethyl ester (9CI) (CA INDEX NAME)

$$C1$$
 $N$ 
 $N$ 
 $CH_2-C-OEt$ 

IT 122417-99-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and reaction with amines or hydrazines or sulfonamides)

RN 122417-99-6 CAPLUS

CN 3(4H)-Quinazolineacetyl chloride, 6,8-dichloro-2-methyl-4-oxo- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} C1 & \text{Me} \\ \hline \\ C1 & \text{N} & \text{O} \\ \hline \\ CH_2-C-C1 \end{array}$$

IT 122418-00-2P 122418-01-3P 122418-02-4P

122418-04-6P

RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)

RN 122418-00-2 CAPLUS

CN 3(4H)-Quinazolineacetamide, 6,8-dichloro-2-methyl-4-oxo-N-(phenylmethyl)-(9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ \text{C1} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ &$$

RN 122418-01-3 CAPLUS

CN 3(4H)-Quinazolineacetamide, 6,8-dichloro-2-methyl-4-oxo-N-phenyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ &$$

RN 122418-02-4 CAPLUS

CN 3(4H)-Quinazolineacetamide, 6,8-dichloro-N-(4-methoxyphenyl)-2-methyl-4-oxo-(9CI) (CA INDEX NAME)

$$C1$$
 $N$ 
 $N$ 
 $CH_2$ 
 $CH_2$ 
 $O$ 
 $O$ 
 $O$ 
 $O$ 
 $O$ 

RN 122418-04-6 CAPLUS

CN 4H-3,1-Benzoxazin-4-one, 2-[(6,8-dichloro-2-methyl-4-oxo-3(4H)-quinazolinyl)methyl]- (9CI) (CA INDEX NAME)

L26 ANSWER 15 OF 17 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1988:630931 CAPLUS

DOCUMENT NUMBER: 109:230931

TITLE: Synthesis and antimicrobial activity of some new

2-(2-methyl-4-oxoquinazolin-3-yl)methyl-5-arylamino-

1,3,4-thiadiazoles

AUTHOR(S): Reddy, A. Malla; Jayamma, Y.; Reddy, P. Ravinder;

Reddy, V. Malla

CORPORATE SOURCE: Coll. Pharm. Sci., Kakatiya Univ., Warangal, 506 009,

India

SOURCE: Indian Drugs (1988), 25(5), 182-3

CODEN: INDRBA; ISSN: 0019-462X

DOCUMENT TYPE: Journal LANGUAGE: English

GI

AB Quinazolineacetic acid hydrazides I (R1 = H, Br) were treated with R2NCS (R2 = Ph, anisyl, tolyl, PhCH2, cyclohexyl) to give title compds. II.

Some II exhibited fungicidal activity.

IT 40889-54-1

RL: RCT (Reactant); RACT (Reactant or reagent)
 (cycloaddn. or cyclocondensation reaction of, with aryl
 isothiocyanates)

RN 40889-54-1 CAPLUS

CN 3(4H)-Quinazolineacetic acid, 6,8-dibromo-2-methyl-4-oxo-, hydrazide (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ Br & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ &$$

IT 117613-00-0P 117613-01-1P 117613-02-2P

117613-03-3P 117613-04-4P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of)

RN 117613-00-0 CAPLUS

CN 4(3H)-Quinazolinone, 6,8-dibromo-2-methyl-3-[[5-(phenylamino)-1,3,4-

thiadiazol-2-yl]methyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ & &$$

RN 117613-01-1 CAPLUS

CN 4(3H)-Quinazolinone, 6,8-dibromo-3-[[5-[(2-methoxyphenyl)amino]-1,3,4-thiadiazol-2-yl]methyl]-2-methyl- (9CI) (CA INDEX NAME)

RN 117613-02-2 CAPLUS

CN 4(3H)-Quinazolinone, 6,8-dibromo-2-methyl-3-[[5-[(2-methylphenyl)amino]-1,3,4-thiadiazol-2-yl]methyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\$$

RN 117613-03-3 CAPLUS

CN 4(3H)-Quinazolinone, 6,8-dibromo-2-methyl-3-[[5-[(phenylmethyl)amino]-1,3,4-thiadiazol-2-yl]methyl]- (9CI) (CA INDEX NAME)

Br 
$$Me$$
  $N-CH_2-Ph$   $N-CH_2-Ph$ 

117613-04-4 CAPLUS RN

CN 4(3H)-Quinazolinone, 6,8-dibromo-3-[[5-(cyclohexylamino)-1,3,4-thiadiazol-2-yl]methyl]-2-methyl- (9CI) (CA INDEX NAME)

CAPLUS COPYRIGHT 2005 ACS on STN L26 ANSWER 16 OF 17

ACCESSION NUMBER: 1983:488151 CAPLUS

DOCUMENT NUMBER: 99:88151

TITLE: Studies on biologically active 2-aryl-3-(2-(2,5-

dihydroxyphenyl)ethyl)-6,8-substituted

quinazolin-(3H)-4-ones

Pandey, V. K.; Lohani, H. C.; Shanker, Krapa; Dovel, AUTHOR (S):

D. C.

Dep. Chem., Lucknow Univ., Lucknow, India CORPORATE SOURCE:

SOURCE: Indian Drugs (1983), 20(8), 315-19

CODEN: INDRBA; ISSN: 0019-462X

DOCUMENT TYPE:

GΙ

Journal

LANGUAGE: English

ОН NCH2CH2 NCH2CH2OH R<sup>2</sup> Ι OH II

- AB Fungicidal, bactericidal, and anticholinergic activity was exhibited by title compds. I (R = H, Br, iodo; R1 = H, Br; R2 = Ph, PhCH:CH), which were prepared Quinazolinone derivative II was heated with hydroquinone and HCl in EtOH to give I (R = R1 = H, R2 = Ph).
- RN 68501-39-3 CAPLUS
- CN 4(3H)-Quinazolinone, 6,8-dibromo-3-(2-hydroxyethyl)-2-(2-phenylethenyl)(9CI) (CA INDEX NAME)

Br 
$$N$$
  $CH = CH - Ph$   $CH_2 - CH_2 - OH$ 

- RN 68501-41-7 CAPLUS
- CN 4(3H)-Quinazolinone, 8-bromo-3-(2-hydroxyethyl)-2-(2-phenylethenyl)- (9CI) (CA INDEX NAME)

$$CH = CH - Ph$$
 $CH_2 - CH_2 - OH$ 

- RN 68501-47-3 CAPLUS
- CN 4(3H)-Quinazolinone, 3-(2-hydroxyethyl)-8-iodo-2-(2-phenylethenyl)- (9CI) (CA INDEX NAME)

- IT 86804-55-9P 86804-56-0P 86804-57-1P
  - RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
  - (preparation and pharmacol. activity of)
- RN 86804-55-9 CAPLUS
- CN 4(3H)-Quinazolinone, 6,8-dibromo-3-[2-(2,5-dihydroxyphenyl)ethyl]-2-(2-phenylethenyl)- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & \text{Br} & \text{OH} \\ & \text{N} & \text{CH} = \text{CH} - \text{Ph} \\ & \text{O} & \text{OH} \end{array}$$

RN 86804-56-0 CAPLUS

CN 4(3H)-Quinazolinone, 8-bromo-3-[2-(2,5-dihydroxyphenyl)ethyl]-2-(2-phenylethenyl)- (9CI) (CA INDEX NAME)

Br OH 
$$CH = CH - Ph$$
 OH  $CH_2 - CH_2$  OH

RN 86804-57-1 CAPLUS

CN 4(3H)-Quinazolinone, 3-[2-(2,5-dihydroxyphenyl)ethyl]-8-iodo-2-(2-phenylethenyl)- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} I & OH \\ \hline N & CH = CH - Ph \\ \hline N - CH_2 - CH_2 \\ \hline OH \end{array}$$

L26 ANSWER 17 OF 17 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1978:615338 CAPLUS

DOCUMENT NUMBER: 89:215338

TITLE: Synthesis of some new 5-mercapto 3-substituted

quinazolone-s-triazoles; their reaction with dibromo

alkanes

AUTHOR(S): Joshi, Puran Chandra; Joshi, P. C.

CORPORATE SOURCE: Dep. Chem., Kumaon Univ. Constituent Coll., Almora,

India

SOURCE: Journal of the Indian Chemical Society (1978), 55(5),

465-7

CODEN: JICSAH; ISSN: 0019-4522

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 89:215338
GI For diagram(s), see printed CA Issue.

AB The quinazolinylmethyl-s-triazoles I (R = H, R1 = H, Br, iodo; R = R1 = H)

IT

CN

Br, Cl), obtained by the cyclization of corresponding quinazolone thiosemicarbazides were treated with Br(CH2)nBr (n = 2, 3) to give 2-substituted 5,6-dihydrothiazolo[3,2-b]-s-triazoles II (n = 2) and 2-substituted 5H-6,7-dihydro-s-triazolo[3,2-b][1,3]thiazines II (n = 3), resp. These compds. were also screened for their antifungal activity against Alternaria alternata, Drechslera papendorfii, and Helminthosporium oryzae. Only quinazolone thiosemicarbazides showed measurable activity. 68241-03-2P 68241-04-3P 68377-73-1P

68377-74-2P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)

(preparation and cyclization of, triazole derivs. from)

RN 68241-03-2 CAPLUS

3(4H)-Quinazolineacetic acid, 8-iodo-2-methyl-4-oxo-, 2-(aminothioxomethyl)hydrazide (9CI) (CA INDEX NAME)

RN 68241-04-3 CAPLUS

CN 3(4H)-Quinazolineacetic acid, 6,8-dichloro-2-methyl-4-oxo-, 2-(aminothioxomethyl)hydrazide (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ & &$$

RN 68377-73-1 CAPLUS

CN 3(4H)-Quinazolineacetic acid, 8-bromo-2-methyl-4-oxo-, 2-(aminothioxomethyl)hydrazide (9CI) (CA INDEX NAME)

Br 
$$Me$$
  $O$   $S$   $H$   $CH_2-C-NH-NH-C-NH_2$ 

RN 68377-74-2 CAPLUS

CN 3(4H)-Quinazolineacetic acid, 6,8-dibromo-2-methyl-4-oxo-, 2-(aminothioxomethyl)hydrazide (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ Br & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ & &$$

IT 68241-18-9P 68241-19-0P 68241-20-3P 68241-21-4P

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation and cyclization with alkylene dibromides, thiazolotriazoles and triazolothiazines from)

RN 68241-18-9 CAPLUS

CN 4(3H)-Quinazolinone, 8-bromo-3-[(2,5-dihydro-5-thioxo-1H-1,2,4-triazol-3-yl)methyl]-2-methyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & \\ & & \\ &$$

RN 68241-19-0 CAPLUS

CN 4(3H)-Quinazolinone, 6,8-dibromo-3-[(2,5-dihydro-5-thioxo-1H-1,2,4-triazol-3-yl)methyl]-2-methyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\$$

RN 68241-20-3 CAPLUS

CN 4(3H)-Quinazolinone, 3-[(2,5-dihydro-5-thioxo-1H-1,2,4-triazol-3-yl)methyl]-8-iodo-2-methyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} I & & Me \\ \hline & N & CH_2 & & N \\ \hline & N & N & H \\ \end{array}$$

RN 68241-21-4 CAPLUS

CN 4(3H)-Quinazolinone, 6,8-dichloro-3-[(2,5-dihydro-5-thioxo-1H-1,2,4-triazol-3-yl)methyl]-2-methyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} C1 & \text{Me} & \text{H} \\ N & \text{CH}_2 & \text{N} \\ N & \text{N} & \text{H} \end{array}$$

IT 68241-07-6P 68241-08-7P 68241-09-8P 68241-10-1P 68241-12-3P 68241-13-4P

68241-14-5P 68241-15-6P

RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)

RN 68241-07-6 CAPLUS

CN 4(3H)-Quinazolinone, 8-bromo-3-[(5,6-dihydrothiazolo[3,2-b][1,2,4]triazol-2-yl)methyl]-2-methyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
S & N & CH_2 & N \\
\hline
N & N & Me
\end{array}$$
Me

Br

RN 68241-08-7 CAPLUS

CN 4(3H)-Quinazolinone, 6,8-dibromo-3-[(5,6-dihydrothiazolo[3,2-b][1,2,4]triazol-2-yl)methyl]-2-methyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
S & N & O & Br \\
N & N & N & Br
\end{array}$$

RN 68241-09-8 CAPLUS

CN 4(3H)-Quinazolinone, 3-[(5,6-dihydrothiazolo[3,2-b][1,2,4]triazol-2-yl)methyl]-8-iodo-2-methyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
S & N & CH_2 & N \\
N & N & Me
\end{array}$$

RN 68241-10-1 CAPLUS

CN 4(3H)-Quinazolinone, 6,8-dichloro-3-[(5,6-dihydrothiazolo[3,2-b][1,2,4]triazol-2-yl)methyl]-2-methyl- (9CI) (CA INDEX NAME)

RN 68241-12-3 CAPLUS

CN 4(3H)-Quinazolinone, 8-bromo-3-[(6,7-dihydro-5H-[1,2,4]triazolo[5,1-b][1,3]thiazin-2-yl)methyl]-2-methyl- (9CI) (CA INDEX NAME)

RN 68241-13-4 CAPLUS

CN 4(3H)-Quinazolinone, 6,8-dibromo-3-[(6,7-dihydro-5H-[1,2,4]triazolo[5,1-b][1,3]thiazin-2-yl)methyl]-2-methyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} S & N & CH_2 & N \\ \hline & N & N & \\ \hline & Me & N & \\ & Br & \\ \end{array}$$

RN 68241-14-5 CAPLUS

CN 4(3H)-Quinazolinone, 3-[(6,7-dihydro-5H-[1,2,4]triazolo[5,1-b][1,3]thiazin-2-yl)methyl]-8-iodo-2-methyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
S & N & CH_2 & N \\
N & N & Me
\end{array}$$

RN 68241-15-6 CAPLUS

CN 4(3H)-Quinazolinone, 6,8-dichloro-3-[(6,7-dihydro-5H-[1,2,4]triazolo[5,1-b][1,3]thiazin-2-yl)methyl]-2-methyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
S & N & CH_2 & N \\
N & N & N
\end{array}$$
C1

IT 40889-52-9 40889-54-1 68241-16-7

68241-17-8

RL: RCT (Reactant); RACT (Reactant or reagent)
 (reaction of, with potassium thiocyanate)

RN 40889-52-9 CAPLUS

CN 3(4H)-Quinazolineacetic acid, 6,8-dichloro-2-methyl-4-oxo-, hydrazide (9CI) (CA INDEX NAME)

$$C1$$
 $N$ 
 $Me$ 
 $CH_2-C-NH-NH_2$ 

RN 40889-54-1 CAPLUS

CN 3(4H)-Quinazolineacetic acid, 6,8-dibromo-2-methyl-4-oxo-, hydrazide (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\$$

RN 68241-16-7 CAPLUS

CN 3(4H)-Quinazolineacetic acid, 8-bromo-2-methyl-4-oxo-, hydrazide (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ & & & \\ &$$

RN 68241-17-8 CAPLUS

CN 3(4H)-Quinazolineacetic acid, 8-iodo-2-methyl-4-oxo-, hydrazide (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
 & \text{Me} \\
 & \text{O} \\
 & \text{CH}_2 - \text{C} - \text{NH} - \text{NH}_2
\end{array}$$

=> s 121 and (fungal plant pathogen or demethylase enzyme)

L27 0 FILE MEDLINE L28 0 FILE BIOSIS L29 0 FILE EMBASE L30 1 FILE CAPLUS

TOTAL FOR ALL FILES

L31 1 L21 AND (FUNGAL PLANT PATHOGEN OR DEMETHYLASE ENZYME)

=> d ibib abs hitstr

L31 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1998:424091 CAPLUS

DOCUMENT NUMBER: 129:95502

TITLE: Preparation of fungicidal quinazolinones

INVENTOR(S):
Bellina, Russell Frank; Bereznak, James Francis;

Christensen, Joel Robert; Chang, Zen-Yu; Fawzi, Maged

Mohamed; Marshall, Eric Allen; Moberg, William Karl; Rorer, Morris Padgett; Sternberg, Charlene Gross; Walker, Michael Paul; Zimmerman, William Thomas

PATENT ASSIGNEE(S):

E. I. Du Pont de Nemours & Co., USA

SOURCE:

PCT Int. Appl., 78 pp.

DOCUMENT TYPE:

CODEN: PIXXD2

LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.				KIND DAT			E APPLICATION NO.						DATE				
WO 982	WO 9826664			A1 1998062			0625	WO 1997-US22779						19971215			
W	: AL,	AM,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BY	, CA,	CN,	CU,	CZ,	EE,	GE,	HU,	
	ID,	IL,	IS,	JP,	KG,	ΚP,	KR,	KZ,	LC	, LK,	LR,	LT,	LV,	MD,	MG,	MK,	
	MN,	MX,	NO,	NZ,	PL,	RO,	RU,	SG,	SI	, SK,	SL,	TJ,	TM,	TR,	TT,	UA,	
	US,	UΖ,	VN,	YU,	AM,	AZ,	BY,	KG,	KZ	, MD,	RU,	TJ,	TM				
R	W: GH,	GM,	KE,	LS,	MW,	SD,	SZ,	UG,	ZW	, AT,	BE,	CH,	DE,	DK,	ES,	FI,	
	FR,	GB,	GR,	IE,	IT,	LU,	MC,	NL,	PT	, SE,	BF,	ВJ,	CF,	CG,	CI,	CM,	
	GΑ,	GN,	ML,	MR,	NE,	SN,	TD,	TG									
AU 9853803			<b>A</b> 1	A1 19980715				AU 1998-53803					19971215				
EP 946095			<b>A1</b>		1999	1006		EP :	1997-	9509	27		1	9971	215		
R	: CH,	DE,	FR,	GB,	IT,	LΙ											
JP 2002513394			T2	20020508			JP 1998-527831					1	9971	215			
PRIORITY APPLN. INFO.:							•	US :	1996-	3365	7P		P 1	9961	217		
									US :	1997-	4196	4 P	:	P 1	9970	403	
								1	WO :	1997-	US22	779	1	W 1	9971	215	

OTHER SOURCE(S):

MARPAT 129:95502

GT

$$\begin{array}{c|c}
R^3 & O \\
\hline
 & N \\
\hline
 & R^1 \\
\hline
 & R^2 \\
\hline
 & R^2
\end{array}$$

The title compds. [I; R3 = Cl, Br, I, C1-8 alkyl, etc.; R4 = H, Cl, Br, I, AB etc.; when R3 and R4 are on adjacent atoms they can be OC(R16)20; W = O, S, SO, etc.; Q = O, S; R1 = C1-10 alkyl, C3-6 cycloalkyl, C3-10cycloalkenyl, etc.; R2 = C1-10 alkyl, C3-7 cycloalkyl, C3-10 cycloalkenyl, etc.; R16 = H, halo, C1-4 alkyl, C1-6 haloalkyl; R19 = Cl, Br, I], useful for controlling plant diseases caused by fungal plant pathogens, were prepared Thus, treatment of 6-iodo-3-n-propyl-2thio-4(3H)-quinazolinedione with phosgene in Pr acetate afforded I [R1 = n-Pr; W = direct bond; R2 = C1; R3 = 6-I; R4 = R19 = H] which showed 99% control against Erysiphe graminis f. sp. tritici at 200 ppm.

209603-93-0P 209603-95-2P 209604-00-2P 209604-01-3P 209604-02-4P 209604-03-5P 209604-05-7P 209604-06-8P 209604-07-9P 209604-08-0P 209604-09-1P 209604-10-4P 209604-11-5P 209604-12-6P 209604-30-8P 209604-31-9P 209604-32-0P 209604-40-0P 209604-47-7P

RL: AGR (Agricultural use); BAC (Biological activity or effector, except

adverse); BSU (Biological study, unclassified); SPN (Synthetic
preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (preparation of fungicidal quinazolinones)

RN 209603-93-0 CAPLUS

CN 4(3H)-Quinazolinone, 6-bromo-2,3-dipropyl- (9CI) (CA INDEX NAME)

RN 209603-95-2 CAPLUS

CN 4(3H)-Quinazolinone, 6-iodo-2,3-dipropyl- (9CI) (CA INDEX NAME)

RN 209604-00-2 CAPLUS

CN 4(3H)-Quinazolinone, 6-iodo-2-methyl-3-propyl- (9CI) (CA INDEX NAME)

RN 209604-01-3 CAPLUS

CN 4(3H)-Quinazolinone, 2-(ethoxymethyl)-6-iodo-3-propyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & \text{N} & \text{CH}_2\text{-OEt} \\ \hline & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ &$$

RN 209604-02-4 CAPLUS

CN 4(3H)-Quinazolinone, 2-(chloromethyl)-6-iodo-3-propyl- (9CI) (CA INDEX NAME)

RN 209604-03-5 CAPLUS
CN 4(3H)-Quinazolinone, 6-iodo-3-propyl-2-[[(tetrahydro-2-furanyl)methoxy]methyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
N & CH_2-O-CH_2 \\
\hline
N & Pr-n
\end{array}$$

RN 209604-05-7 CAPLUS CN 4(3H)-Quinazolinone, 6-iodo-2-(4-morpholinylmethyl)-3-propyl- (9CI) (CA INDEX NAME)

RN 209604-06-8 CAPLUS
CN 4(3H)-Quinazolinone, 6-iodo-2-[(methylsulfonyl)methyl]-3-propyl- (9CI)
(CA INDEX NAME)

$$\begin{array}{c|c} & & & & \\ & &$$

RN 209604-07-9 CAPLUS
CN 4(3H)-Quinazolinone, 6-iodo-3-propyl-2-[(propylamino)methyl]- (9CI) (CAINDEX NAME)

$$\begin{array}{c|c}
 & \text{N} & \text{CH}_2\text{-OEt} \\
 & \text{N} & \text{CH}_2
\end{array}$$

RN 209604-09-1 CAPLUS
CN 4(3H)-Quinazolinone, 2-(ethoxymethyl)-6-iodo-3-[(tetrahydro-2-furanyl)methyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
 & \text{CH}_2 - \text{O} - \text{CH}_2 \\
\hline
 & \text{N} \\
 & \text{Pr-n}
\end{array}$$

RN 209604-11-5 CAPLUS CN 4(3H)-Quinazolinone, 2-(chloromethyl)-3-(cyclopropylmethyl)-6-iodo- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & \text{CH}_2\text{Cl} \\ & & \text{N} & \text{CH}_2 \end{array}$$

RN 209604-12-6 CAPLUS
CN 4(3H)-Quinazolinone, 2-(chloromethyl)-6-ioc

4(3H)-Quinazolinone, 2-(chloromethyl)-6-iodo-3-[(tetrahydro-2-furanyl)methyl]- (9CI) (CA INDEX NAME)

RN 209604-30-8 CAPLUS

CN Propanedioic acid, (6-chloro-3,4-dihydro-4-oxo-3-propyl-2-quinazolinyl)-, dimethyl ester (9CI) (CA INDEX NAME)

RN 209604-31-9 CAPLUS

CN Propanedinitrile, (6-chloro-3,4-dihydro-4-oxo-3-propyl-2-quinazolinyl)(9CI) (CA INDEX NAME)

RN 209604-32-0 CAPLUS

CN 2-Quinazolineacetic acid, 6-chloro- $\alpha$ -cyano-3,4-dihydro-4-oxo-3-propyl-, methyl ester (9CI) (CA INDEX NAME)

RN 209604-40-0 CAPLUS CN 4(3H)-Quinazolinone, 6-chloro-3-(1-methylethyl)-2-(trifluoromethyl)- (9CI) (CA INDEX NAME)

RN 209604-47-7 CAPLUS

CN 4(3H)-Quinazolinone, 2-(1-ethylbutyl)-6-iodo-3-propyl- (9CI) (CA INDEX NAME)

REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L34 0 FILE EMBASE L35 1 FILE CAPLUS

TOTAL FOR ALL FILES

L36 1 ERYSIPHE GRAMINIS AND L21

=> d

L36 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1998:424091 CAPLUS

DN 129:95502

TI Preparation of fungicidal quinazolinones

IN Bellina, Russell Frank; Bereznak, James Francis; Christensen, Joel Robert; Chang, Zen-Yu; Fawzi, Maged Mohamed; Marshall, Eric Allen; Moberg, William Karl; Rorer, Morris Padgett; Sternberg, Charlene Gross; Walker, Michael Paul; Zimmerman, William Thomas

PA E. I. Du Pont de Nemours & Co., USA

SO PCT Int. Appl., 78 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE

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ΡI
                                  19980625
                                             WO 1997-US22779
     WO 9826664
                           A1
         W: AL, AM, AU, AZ, BA, BB, BG, BR, BY, CA, CN, CU, CZ, EE, GE, HU,
             ID, IL, IS, JP, KG, KP, KR, KZ, LC, LK, LR, LT, LV, MD, MG, MK,
             MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, SL, TJ, TM, TR, TT, UA,
             US, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI,
             FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG
                                            AU 1998-53803
EP 1997-950927
     AU 9853803
                           A1
                                  19980715
                                                                       19971215
     EP 946095
                           A1
                                  19991006
                                                                       19971215
         R: CH, DE, FR, GB, IT, LI
JP 2002513394
PRAI US 1996-33657P
                          T2
                                  20020508
                                           JP 1998-527831
                                                                       19971215
                           P
                                  19961217
     WO 1997-US22779
                           P
                                  19970403
                           W
                                 19971215
    MARPAT 129:95502
OS
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RE.CNT 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

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TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2005

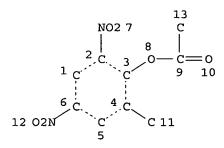
Please note that search-term pricing does apply when conducting SmartSELECT searches.

Structure search iteration limits have been increased. See HELP SLIMITS for details.

Experimental and calculated property data are now available. For more

information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at: http://www.cas.org/ONLINE/DBSS/registryss.html

=> => d 139 que stat;d 142 que stat;fil medl,biosis,embase,caplus;s 139 or 142 L37 STR



NODE ATTRIBUTES: DEFAULT MLEVEL IS ATOM DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES: RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 13

STEREO ATTRIBUTES: NONE
L39 418 SEA FILE=REGISTRY SSS FUL L37

100.0% PROCESSED 1665 ITERATIONS 418 ANSWERS SEARCH TIME: 00.00.01

NODE ATTRIBUTES: DEFAULT MLEVEL IS ATOM DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES: RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 13

STEREO ATTRIBUTES: NONE L42 123 SEA FILE=REGISTRY SSS FUL L40

100.0% PROCESSED 2462 ITERATIONS 123 ANSWERS

SEARCH TIME: 00.00.01

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DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE
ENTRY
SESSION
CA SUBSCRIBER PRICE

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L43 2 FILE MEDLINE
L44 191 FILE BIOSIS
L45 78 FILE EMBASE
L46 1178 FILE CAPLUS

TOTAL FOR ALL FILES

L47 1449 L39 OR L42

=> s 147 and (fungicid? or control?(1)mildew? or powder mildew? or bc1 complex or fungal mitochrondrial or sterol biosynthes? or fungal plant pathogen or erysiphe graminis)

L48 0 FILE MEDLINE
L49 54 FILE BIOSIS
L50 15 FILE EMBASE
L51 422 FILE CAPLUS

### TOTAL FOR ALL FILES

L52 491 L47 AND (FUNGICID? OR CONTROL?(L) MILDEW? OR POWDER MILDEW? OR BC1 COMPLEX OR FUNGAL MITOCHRONDRIAL OR STEROL BIOSYNTHES? OR FUNGAL PLANT PATHOGEN OR ERYSIPHE GRAMINIS)

=> s 15 and demethylase enzyme

L53 0 FILE MEDLINE
L54 0 FILE BIOSIS
L55 0 FILE EMBASE
L56 0 FILE CAPLUS

#### TOTAL FOR ALL FILES

L57 0 L5 AND DEMETHYLASE ENZYME

=> s 147 and (fungicid? or control?(1)mildew? or powder mildew?) and (bc1 complex or fungal mitochrondrial or sterol biosynthes? or fungal plant pathogen or erysiphe graminis)

L58 0 FILE MEDLINE L59 0 FILE BIOSIS L60 0 FILE EMBASE L61 18 FILE CAPLUS

TOTAL FOR ALL FILES

L62 18 L47 AND (FUNGICID? OR CONTROL?(L) MILDEW? OR POWDER MILDEW?)

AND (BC1 COMPLEX OR FUNGAL MITOCHRONDRIAL OR STEROL BIOSYNTHES?

OR FUNGAL PLANT PATHOGEN OR ERYSIPHE GRAMINIS)

=> d 1-18 ibib abs

L62 ANSWER 1 OF 18 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1981:419727 CAPLUS

DOCUMENT NUMBER: 95:19727

TITLE: Fungicidal and acaricidal molecular complex

INVENTOR(S): Baicu, Tudorel; Vilceanu, Radu; Neamtiu, Ileana;

Iacob, Nicolae

PATENT ASSIGNEE(S): Centrul de Cercetari pentru Protectia Plantelor, Rom.

SOURCE: Rom., 4 pp. CODEN: RUXXA3

DOCUMENT TYPE: Patent

LANGUAGE: Patent Romanian

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

RO 67434 B 19790308 RO 1975-81065 19750108
PRIORITY APPLN. INFO:: RO 1975-81065 19750108

AB Acenaphthene-dinobuton mol. complex (1:1) [77523-49-0], acenaphthene-binapacryl mol. complex (1:1) [77523-50-3], and acenaphthene-chloranil mol. complex (1:1) [38161-35-2] are highly active fungicides and acaricides. Thus, acenaphthene-dinobuton complex (0.1%) partially controlled Erysiphe graminis on wheat and totally Tetranychus urticae on bean.

L62 ANSWER 2 OF 18 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1979:535524 CAPLUS

DOCUMENT NUMBER: 91:135524

TITLE: Side effects of herbicidal urea and triazine derivatives on wheat infested with Erysiphe

graminis f. sp. tritici. I. Herbicidal

effects on the infestation by powdery mildew and yield

of wheat

AUTHOR(S): Ibenthal, W. D.; Heitefuss, R.

CORPORATE SOURCE: Inst. Pflanzenpathol. Pflanzenschutz,

Georg-August-Univ., Goettingen, Fed. Rep. Ger.

SOURCE: Phytopathologische Zeitschrift (1979), 95(2), 111-27

CODEN: PHYZA3; ISSN: 0031-9481

DOCUMENT TYPE: Journal LANGUAGE: German

AB The infestation of wheat with powdery mildew can be modified by

the application of herbicidal urea- and triazine derivs. such as Aniten S

[8074-23-5], Aretit [2813-95-8], Avenge [43222-48-6], and

Dicuran [15545-48-9]. Germination of conidiospores as well as growth of germ tubes of the fungus were inhibited, and a reduced number of colonies were observed after application of practical doses of the herbicides on the leaf surface of the hosts. These inhibitions of fungus growth presumably

resulted from direct fungicidal effects of the applied

herbicides. The inhibition effects were especially conspecious for Tribunil [18691-97-9]. When the herbicides were applied to roots of the wheat with concns. below those of the fungicidal doses, a reduced degree of mildew infestation and sporulation were observed in the period immediately following the application (shock phase). Later, however, a stimulation of infestation as well as sporulation of the fungus was found during the so-called recovery phase on treated plants. In field trials, the yield of spring wheat was increased by the herbicides only if simultaneously mildew is controlled with fungicides. No increase of yield was observed, when the herbicides were applied without fungicide. The eradication of weeds by the herbicides, which should pos. affect the yield, was negated in that case by the stimulatory effects of these herbicides on the infestation and sporulation of the fungus during the recovery phase.

L62 ANSWER 3 OF 18 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1978:501590 CAPLUS

DOCUMENT NUMBER: 89:101590

TITLE: Antimildew effect of the post-emergent application of

herbicides

AUTHOR (S): Rapparini, Gabriele

CORPORATE SOURCE: Ist. Patol. Veg., Univ. Bologna, Bologna, Italy SOURCE: Annali - Accademia Nazionale di Agricoltura (Italy)

(1976), 96(1-2-3-4), 85-7

CODEN: AANAD2; ISSN: 0001-4443

DOCUMENT TYPE: Journal LANGUAGE: Italian

In pot expts. dinoterb [1420-07-1] controlled Erysiphe graminis on wheat, with no phytotoxicity to the wheat. Dinoseb
[88-85-7], DNOC [534-52-1], and ioxynil-CMPP mixture [8065-35-8] were active against the fungus, but were phytotoxic at the fungicidally -active doses. Trifluralin [1582-09-8] showed moderate

fungicidal activity and was not phytotoxic.

L62 ANSWER 4 OF 18 CAPLUS COPYRIGHT 2005 ACS on STN

1977:497267 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 87:97267

TITLE: Effects of post-emergence herbicides on powdery mildew

of wheat

AUTHOR (S): Rapparini, Gabriele

CORPORATE SOURCE: Cent. Studi Antiparassitari, CNR, Bologna, Italy SOURCE: Informatore Fitopatologico (1977), 27(2), 9-10

CODEN: INFTAP; ISSN: 0020-0735

DOCUMENT TYPE: Journal LANGUAGE: Italian

Of 8 herbicides tested in pot expts., Dinoterb [1420-07-1], Dinoseb [88-85-7], DNOC [534-52-1] and ioxynil-CMPP K salt mixture [63797-12-6] were

the most active in controlling powdery mildew caused by Erysiphe graminis in wheat. Dinoseb and DNOC were

phytotoxic to the wheat.

L62 ANSWER 5 OF 18 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1972:522888 CAPLUS

DOCUMENT NUMBER: 77:122888

TITLE: Results of testing new fungicides against

powdery mildew of wheat

AUTHOR (S): Tursumbaev, A.

Kaz. Inst. Zashch. Rast., USSR CORPORATE SOURCE:

SOURCE: Vestnik Sel'skokhozyaistvennoi Nauki (Alma-Ata)

(1972), 15(6), 39-41

CODEN: VSKKAV; ISSN: 0042-4684

DOCUMENT TYPE: Journal LANGUAGE: Russian

AB Sulfur [7704-34-9] colloid (2%) Morestan (I) [2439-01-2] (0.5%), and

Karathane [6119-92-2] (0.7%) applied by spraying were more

effective than Thiovit (0.5%) in preventing and inhibiting powdery mildew

damage to wheat in the southeast Kazakhstan.

L62 ANSWER 6 OF 18 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1972:430150 CAPLUS

DOCUMENT NUMBER: 77:30150

TITLE: Mode of action of systemic fungicides on

erysiphe graminis

AUTHOR(S): Schlueter, K.; Weltzien, H. C.

CORPORATE SOURCE: Inst. Pflanzenkr., Rheinischen Friedrich-Wilhelms-

Univ., Bonn, Fed. Rep. Ger.

SOURCE: Mededelingen van de Faculteit Landbouwwetenschappen,

Universiteit Gent (1971), 36(3), 1159-64

CODEN: MFLRA3; ISSN: 0368-9697

DOCUMENT TYPE: Journal LANGUAGE: German

AB Sixteen fungicides were divided into 4 groups on the basis of

whether their effect on infection of barley by Erysiphe

graminis hordei was to inhibit (1) germination of conidia, (2)

appressoria formation, (3) infection hypha formation, or (4) haustoria

formation.

L62 ANSWER 7 OF 18 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1972:401646 CAPLUS

DOCUMENT NUMBER: 77:1646

TITLE: Effect of Dinocap on water-retaining capacity of

tissues of the host after infection by

Erysiphe graminis. II

AUTHOR(S): Priehradny, Stanislav; Janitor, Anton

CORPORATE SOURCE: Bot. Ustav, Slovakian Akad. Ved, Bratislava, Czech.

SOURCE: Polnohospodarstvo (1954-2001) (1971), 17(11-12),

958-65

CODEN: POLNAJ; ISSN: 0551-3677

DOCUMENT TYPE: Journal LANGUAGE: Slovak

AB Dinocap (I) [6119-92-2] increased the capacity of plants

infected with E. graminis to bind water, thus helping the plant to recover

some of its physiol. functions.

L62 ANSWER 8 OF 18 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1972:149835 CAPLUS

DOCUMENT NUMBER: 76:149835

TITLE: Effect of dinocap spray on the capacity of barley to

bind water when attacked by Erysiphe

graminis sp. hordei marchal. I

AUTHOR(S): Priehradny, Stanislav; Janitor, Anton

CORPORATE SOURCE: Bot. Ustav, Slov. Akad. Vied, Bratislava, Czech.

SOURCE: Polnohospodarstvo (1954-2001) (1971), 17(10), 832-44

CODEN: POLNAJ; ISSN: 0551-3677

DOCUMENT TYPE: Journal LANGUAGE: Slovak

AB Spraying with 0.1% dinocap (I) [6119-92-2] increased the

capacity of tissues to retain water, in the healthy barley, but especially in

barley infected with E. graminis hordei. I retarded the withering of

cut-off barley plants. The fungicidal effect of I was higher in

preinoculation treatment, as compared to postinoculation treatment.

L62 ANSWER 9 OF 18 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

1972:42580 CAPLUS

DOCUMENT NUMBER:

76:42580

TITLE:

Effect of systemic and nonsystemic compounds on the in

vitro germination of powdery mildew conidia

AUTHOR (S):

SOURCE:

De Waard, M. A.

CORPORATE SOURCE:

Lab. Phytopathol., Agric. Univ., Wageningen, Neth. Mededelingen van de Faculteit Landbouwwetenschappen,

Universiteit Gent (1971), 36(1), 113-19

CODEN: MFLRA3; ISSN: 0368-9697

DOCUMENT TYPE:

Journal English

LANGUAGE:

Condia of cucumber powdery mildew (Sphaerotheca fuliginea) and barley powdery mildew (Erysiphe graminis f. hordei) were able to germinate on cellophane membranes laid on agar. Karathane (mixture of dinitrooctylphenyl crotonates), Acrex (2-(1-methyl-n-propyl-4,6-dinitrophenyl isopropyl carbonate) [973-21-7], and Morestan (6-methyl-2-oxo-1,3-dithiolo[4,5-b]quinoxaline) [2439-01-2] incorporated

(6-methyl-2-oxo-1,3-dithiolo[4,5-b]quinoxaline) [2439-01-2] incorporated into the agar directly inhibited germination of both conidia. PP 149 (5-butyl-2-ethylamino-4-hydroxy-6-methylpyrimidine) [23947-60-6] and PP 675 (5-butyl-2-dimethylamino-4-hydroxy-6-methylpyrimidine) [5221-53-4] strongly inhibited germination of cucumber mildew spores, whereas benomyl [17804-35-2] and Hoe 2873 (2-(0,0-diethylthionophosphoryl-5-methyl-6-ethoxycarbonylpyrazolo[1,5-a]pyrimidine) were more effective against barley mildew spores. WP 155 (1-(bis(dimethylamido)phosphoryl)-3-phenyl-5-amino-1,2,4-triazole) [1031-47-6] and WP 356 (1-

(bis(dimethylamido)phosphoryl)-3-isopropyl-5-anilido-1,2,4-triazole)

[33698-12-3] were only weakly effective.

L62 ANSWER 10 OF 18 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

1971:110868 CAPLUS

DOCUMENT NUMBER: TITLE:

74:110868

Testing of fungicides and insecticides in

1969

AUTHOR(S):

Noeddegaard, E.; Hansen, Torkil; Noehr Rasmussen, A.

CORPORATE SOURCE:

Den.

SOURCE:

Tidsskrift for Planteavl (1970), 74(5), 618-61

CODEN: TPLAAV; ISSN: 0040-7135

DOCUMENT TYPE:

LANGUAGE:

Journal Danish

AB A detailed report covering the expts. conducted in 1969 at Danish experiment stations with numerous insecticides and fungicides applied to cereals (barley, rye, wheat), beans, peas, potatoes, onions, cucumber, fruit trees (apple, pears, plums), and berries (strawberries, currants, cherries) is presented. In addition, storage expts. on apples, treated for scab infection, sterilization of soils in greenhouses against root knot nematodes by MeBr and chloropicriu, and between tomato crops by Br or steam were conducted. The data are tabulated, supplemented by an alphabetic order listing of 100 chemical compds. used, giving common names, when available, and trade names.

L62 ANSWER 11 OF 18 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

1970:54076 CAPLUS

DOCUMENT NUMBER:

72:54076

TITLE:

Control of powdery mildew in

cereals and grains

INVENTOR(S):

Evans, Elfed; Howes, Roynon

PATENT ASSIGNEE(S):

Fisons Ltd.

SOURCE: Ger. Offen., 8 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 1921981	А	19691120	DE 1969-1921981	19690430
NL 6906778	Α	19691105	NL 1969-6778	19690502
FR 2007766	A5	19700113	FR 1969-13995	19690502
PRIORITY APPLN. I	NFO.:		GB 1968-21074	A 19680503

AB The mildew is controlled by means of straight-chain

compds. CmH2m+1-r(OCH2CH2)80CH2CH2OH where m is 12-20, r is 0 or 2 and s is 3-10, the preferred alkyl chains being C16H33 and C18H35. The **fungicide** is applied as an aqueous solution containing 100-10,000 ppm of active ingredient and may also be combined with materials such as 2,4-dinitro-6-(2-octyl)phenyl crotonate, N-tri-chloromethylmercapto-4-cyclohexene-1,2-dicarboximide, or 0,0-di-Me S-(N-methylcarbamoylmethyl)phosphorodithioate.

L62 ANSWER 12 OF 18 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1969:27916 CAPLUS

DOCUMENT NUMBER: 70:27916

TITLE: Structures and pesticidal activities of derivatives of

dinitrophenols. X. Effects of substitution of dinitrophenols with C3 to C13  $\alpha\text{-branched}$  alkyl groups and of esterification on the eradication of

barley mildew

AUTHOR(S): Pianka, Max; Sweet, Patrick J. J.

CORPORATE SOURCE: Murphy Chem. Co. Ltd., Wheathampstead, UK

SOURCE: Journal of the Science of Food and Agriculture (1968).

19(11), 672-5

CODEN: JSFAAE; ISSN: 0022-5142

DOCUMENT TYPE: Journal LANGUAGE: English

AB The eradication of barley mildew due to Erysiphe graminis with alkyldinitrophenols was studied. The degree of eradication was highest with 4-(C9  $\alpha$ -branched alkyl)-2, 6-dinitrophenols. 4-Alkyl-2, 6-dinitrophenols containing a heptyl or higher alkyl branch were significantly less active, and compds. containing the C12 or C13-alkyls were not active since the most compact of the C12  $\alpha$ -branched alkyl is 1-pentylheptyl. 2-(1-Methylheptyl)- and 2-(1-propylpentyl)-4, 6-dinitrophenols had high activity, but their esters showed reduced activity. Esterification of  $4-(\alpha-branched\ alkyl)-2$ , 6-dinitrophenols to Me carbonates did not affect the activity shown by the compds., but when certain 4-C10 and C11 alkyl-2, 6-dinitrophenols were esterified to Et carbonates the activity of the product was reduced. activity was diminished by conversion of some 4-C9 and C10 alkyl-2, 6-dinitrophenols to crotonates. Whereas the Me and Et carbonates of 4-(1-ethoxyhexyl)-2, 6-dinitrophenol have consistently high degrees of eradication of barley mildew, the performance of the crotonate of this phenol was not consistent. Lower aliphatic esters of the active C:-alkyl phenols were active. Esterification of 4-(1-ethylhexyl)-2, 6-dinitrophenol to the benzoate, iso-Pr carbonate, or S-Me thiolocarbonate gave compds. with substantially reduced activity. 2-tert-Butyl-4, 6-dinitrophenyl or 4-tert-butyl- or tert-octyl-2, 6-dinitrophenyl esters

gave little or no significant eradication.

L62 ANSWER 13 OF 18 CAPLUS COPYRIGHT 2005 ACS on STN

1968:466408 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 69:66408

TITLE: Interaction in vitro of some dinitroalkylphenols and

their crotonic esters with powdery mildew in relation

to toxicity in vivo

Haverkate, F.; Tempel, A.; Verloop, A. AUTHOR (S):

Agrobiol. Lab. "Boekesteyn" 's-Graveland, N. V. CORPORATE SOURCE:

Philips-Duphar, 's-Graveland, Neth.

Mededelingen Rijksfaculteit Landbouwwetenschappen, SOURCE:

Gent (1967), 32(3-4), 745-51 CODEN: MRLAB3; ISSN: 0369-1721

DOCUMENT TYPE: Journal English

LANGUAGE: Spores of Erysiphe graminis (barley mildew)

were incubated in aqueous solns. of the title compds., and tests were also made of the toxicity of the same compds. on barley seedlings inoculated with the same fungus. Interaction of the spores with the phenols was greatly dependent upon the pH of the medium. Dinitromethyl- and dinitro-sec-butylphenols accumulated only in the nonionized form (below pH 6.0). The more apolar derivs., such as 2,4-dinitro-sec-octylphenol accumulated even if the ionized form was involved. **Control** of mildew parallelled the accumulation by the spores. The crotonic esters were taken up by the spores and hydrolyzed within the cell into the corresponding phenols, which were responsible for the toxicity. For that reason the differences in fungicidal action between the 2,4- and the 2,6-dinitroalkylphenyl esters were determined by the extent to which the esters were hydrolyzed.

L62 ANSWER 14 OF 18 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1968:67985 CAPLUS

DOCUMENT NUMBER: 68:67985

TITLE: Vapor action of fungicides against powdery

mildews

AUTHOR (S): Bent, Keith J.

Imp. Chem. Inds. Ltd., Fealott's Hill Res. Sta., CORPORATE SOURCE:

Bracknell, UK

SOURCE: Annals of Applied Biology (1967), 60(2), 251-63

CODEN: AABIAV; ISSN: 0003-4746

DOCUMENT TYPE: Journal LANGUAGE: English

AB The growth of Sphaerotheca fuliginea, Erysiphe graminis

, Podosphaera leucotricha, and Uncinula necator was prevented by the vapors of S, lime S, drazoxolon, oxythioquinox, binapacryl, dinitrooctylphenyl crotonates, and O,O-di-Et phthalimidophosphonothionate. The systemic fungicides griseofulvin and triamiphos gave no detectable vapor action. Deposits applied to leaves by high- or low-volume sprays at concns. used in the field gave significant protection at a distance. Vapor effects were also demonstrated on mildew conidia incubated on glass slides bearing a spot of fungicide, and on infected plants placed in beakers coated on the bottom with

fungicide.

L62 ANSWER 15 OF 18 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1965:475659 CAPLUS

DOCUMENT NUMBER: 63:75659

ORIGINAL REFERENCE NO.: 63:13962g-h,13963a

TITLE: Factors in testing fungicides against

powdery mildew. II Tests against oat powdery mildew in

the greenhouse

AUTHOR(S): Zaracovitis, C.

CORPORATE SOURCE: Long Ashton Res. Sta., Bristol, UK

SOURCE: Annals of Applied Biology (1965), 55(2), 275-86

CODEN: AABIAV; ISSN: 0003-4746

DOCUMENT TYPE: Journal LANGUAGE: English

cf. ibid. 54, 361(1964). Ethylan CP at 0.0025% in demineralized water (plus 1-2% acetone or EtOH) was satisfactory for formulating chemicals in tests with Erysiphe graminis on oat seedlings. Triton X-100, Triton X-155, polyethylene glycol 600 monooleate, Texofor F20, didecyldi-methylammonium bromide, succinate N, and Na dodecyl sulfate, at 0.005-0.1%, were less satisfactory. Dinocap E.C. (reputed to be 2-(1-methylheptyl)-4,6-dinitrophenyl crotonate), lauric acid, and N-(trichloromethylthio)hexahydrophthalimide applied at 2.5 + 10-4M, 2.5 + 10-4M, and 10-3M, resp., 24 hrs. after inoculation were significantly less effective as fungicides than at 48 and 72 hrs. Percentage reduction of infection obtained with 2.5 + 10-4M solns. of fatty acids applied 48 hrs. after inoculation was as follows: octanoic 3, nonanoic 9, decanoic 59, undecanoic 98, lauric 98.8, tridecanoic 92, myristic 42, palmitic 7. The following percentage reduction was obtained with amines at the same concentration: n-octyl 2, n-decyl 86, n-dodecyl 94, n-tridecy

197, n-hexadecyl 48. The ethylamine salt of lauric acid, dodecanamide, and 1-dodecanol gave redns. of 67, 13, and 5%, resp.; oleic, linolenic, and dodecanedioic acids were inactive.

L62 ANSWER 16 OF 18 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1965:457965 CAPLUS

DOCUMENT NUMBER: 63:57965
ORIGINAL REFERENCE NO.: 63:10602b-e
TITLE: Fungicides

INVENTOR(S): Koeniq, Karl H.; Sanne, Walter; Pommer, Ernst H.

PATENT ASSIGNEE(S): Badische Anilin- & Soda-Fabrik AG

SOURCE: 2 pp.
DOCUMENT TYPE: Patent
LANGUAGE: Unavailable

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

DE 1197674 19650729 DE 19621109

Morpholines with straight or branched alkyls on N and 1-2 C alkyls at C

AB atoms 2 and 6 have fungicidal action provided that at least 1 of the alkyls on the C contains 2 C. Pot-grown barley seedlings were sprayed with aqueous emulsions of a mixture of isomers of 4-tridecyl-2-methyl-6ethylmorpholine (I) or of 4-lauryl-2-methyl-6-ethylmorpholine (II) b0.3 136-7°, n25D 1.4566. The concns. of fungicide were 0.0035, 0.0075, 0.015, or 0.03%. After the fungicidal spray dried the plants were sprayed with spores of barley mildew, Erysiphe graminis var hordei and then placed in a greenhouse at 20-2° with relative humidity, 75-80% for 10 days. The extent of defoliation as test of infection was scored on an arbitrary scale 0-5 in which 0 = no and 5 = total loss. I and II rated 0 at the first 2 concns. with a slight loss at 0.015%. This was compared with the fungicidal effect of N-lauryldiethanolamine and N-lauryldiisopropanolamine (CA 45, 8713a); both rated 5 at all concns. The 4-undecenylmorpholine (Coan and Papa (CA 50, 3211e) rated 5, 3, 2, 1; 2,4-dinitro-6-(methylheptyl)phenyl crotonate rated 5, 4, 1, 0.

4-R-2-methyl-6-ethyl morpholines in which R was lauryl, stearyl, or a

mixture of C8-C18 alkyls with b0.2 149-50, 193-7°, b0.5 138-46° and n25D 1.4519, 1.4561, resp., have similar properties. These compds. are useful as dusts with extenders, dry or liquid with dispersants, wetting agents, or adherents, or as mixts. with insecticides and other fungicides and also for seed treatment. They were also effective against Botrytis cinerea.

L62 ANSWER 17 OF 18 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1965:457921 CAPLUS

DOCUMENT NUMBER: 63:57921

ORIGINAL REFERENCE NO.: 63:10593g-h,10594g

TITLE: The effect of sprays on the fauna of apple trees. III.

The influence of certain fungicides and

petal-fall insecticides on the fruit tree red spider

mite and its predators

AUTHOR(S): Muir, R. C.

SOURCE: Ann. Rept., East Malling Res. Sta., Kent (1965),

Volume Date 1964 167-70

DOCUMENT TYPE: Journal LANGUAGE: English

AB cf. J. Appl. Ecol. 2, 31-41(1965). The effects of **fungicide** and insecticide spray programs were assessed upon Metatetranychus ulmi and its predators (Typhlodromus pyri and Blepharidopterus angulatus). Egg susceptibility tests were carried out on B. angulatus under insect infestation conditions. Sprays were as follows: captan 0.1; captan 0.1 plus dinocap 0.025; lime-sulfur preblossom 2.5; nicotine 0.05; and  $\gamma$ -BHC 0.0125%, on 6 occasions, from green cluster stage, at fortnightly intervals. Populations of mites were sampled on 8 leaves from 5 trees using the mite brushing machine. Nicotine and  $\gamma$ -BHC had no effect. Captan or captan plus dinocap did not increase M. ulmi and the ratio of M. ulmi to T. pyri was satisfactory. None of these 4 sprays should result in a mite outbreak. Lime-sulfur reduced T. pyri and increased M. ulmi and reduced the % hatch of B. angulatus to 53.6 while DNOC in petroleum gave 58.5 (control 82.9).

L62 ANSWER 18 OF 18 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1959:69160 CAPLUS

DOCUMENT NUMBER: 53:69160
ORIGINAL REFERENCE NO.: 53:12567g-h

TITLE: Karathane: the value of its differential

fungicidal effect in relation to mildew and

yellow rust of wheat

AUTHOR(S): Doling, D. A.; Hepple, Shirley

CORPORATE SOURCE: Natl. Inst. Agr. Botany, Cambridge, UK

SOURCE: Nature (London, United Kingdom) (1959), 183, 622

CODEN: NATUAS; ISSN: 0028-0836

DOCUMENT TYPE: Journal LANGUAGE: Unavailable

AB Karathane was shown to control powdery mildew (

Erysiphe graminis) of wheat without affecting yellow

rust (Puccinia glumarum). This allowed exptl. study of wheat rust in the

glasshouse without interference of the otherwise bothersome mildew

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L64 5 FILE BIOSIS
L65 0 FILE EMBASE
L66 4 FILE CAPLUS

TOTAL FOR ALL FILES

9 GEDDENS R?/AU

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L68 ANSWER 1 OF 8 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2003:991257 CAPLUS

DOCUMENT NUMBER: 140:14033

TITLE: Mixtures of fused pyrimidinones and dinitrophenol

derivatives as synergistic fungicides for controlling

powdery mildew

INVENTOR(S): Geddens, Ray Michael; Klapproth, Michael

Caldwell

PATENT ASSIGNEE(S): E. I. Du Pont de Nemours & Co., USA

SOURCE: PCT Int. Appl., 26 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATEN	PATENT NO.				KIND DATE				APPLICATION NO.						DATE				
WO 20	WO 2003103393			A1 20031218			WO 2003-US18608					20030610							
W	: AE,	AG,	AL,	AM,	ΑT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	ΒZ,	CA,	CH,	CN,			
	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,			
	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	ΚP,	KR,	ΚZ,	LC,	LK,	LR,			
	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NI,	NO,	NZ,	OM,			
	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	TJ,	TM,	TN,	TR,	TT,			
	TZ,	UA,	UG,	US,	UΖ,	VC,	VN,	YU,	ZA,	ZM,	ZW								
R	W: GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	AZ,	BY,			
		KZ,																	
	FI,	FR,	GB,	GR,	HU,	IE,	IT,	LU,	MC,	NL,	PT,	RO,	SE,	SI,	SK,	TR,			
		ВJ,																	
								BR 2003-11600											
EP 15	11380			<b>A1</b>		2005	0309	]	EP 2	003-	7345	71		2	0030	610			
R	: AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,			
	IE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	АL,	TR,	BG,	CZ,	EE,	HU,	SK				
PRIORITY APPLN. INFO.:						US 2002-387636P				36P	P 20020611								
								1	WO 2	003-1	JS18	608	Ţ	W 2	0030	610			
OTHER SOURCE(S):					MARPAT 140:14033														

OTHER SOURCE(S):

GI

$$\begin{array}{c}
R^3 \\
0 \\
N \\
R^2
\end{array}$$

AB This invention discloses fungicidal compns. comprising (a) fused pyrimidinones I, including all geometric and stereoisomers, N-oxides, and suitable salts thereof, wherein G is a fused Ph, thiophene or pyridine ring, R1 is C1-C6 alkyl or C4-C7 cycloalkylalkyl, R2 is C1-C6 alkyl, C1-C6 alkoxy or C1-C6 alkylthio, R3 is halogen, and R4 is hydrogen or halogen, and (b) dinitrophenol derivs. selected from 1,3-dinitro-5-R5-benzenes further substituted at either the 2- or 4-position with OC(O)J (i.e. II and/or III) including all geometric and stereoisomers, wherein J is C1-C6 alkyl, C1-C6 alkoxy or C2-C6 alkenyl; and R5 is C1-C8 alkyl. This invention also discloses control of powdery mildew by applying to the plant or portion thereof, or to the plant seed or seedling, a fungicidally effective amount of such compns.

REFERENCE COUNT: THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L68 ANSWER 2 OF 8 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN

ACCESSION NUMBER: 2003:383976 BIOSIS DOCUMENT NUMBER:

PREV200300383976

TITLE:

Managing a wide range of tomato diseases with

famoxadone-based fungicides.

AUTHOR (S):

Williams, R. [Reprint Author]; Shepherd, C. [Reprint

Author]; Martin, M. [Reprint Author]; Ganske, D. [Reprint Author]; Steele, W. [Reprint Author]; Ramirez, H. [Reprint

Author]; Geddens, R. [Reprint Author]

CORPORATE SOURCE:

Stine-Haskell Research Center, DuPont Crop Protection, P.O.

Box 30, Newark, DE, 19714, USA

SOURCE:

Phytopathology, (June 2003) Vol. 93, No. 6 Supplement, pp.

S90. print.

Meeting Info.: Annual Meeting of the American

Phytopathological Society. Charlotte, North Carolina, USA. August 09-13, 2003. American Phytopathological Society.

ISSN: 0031-949X (ISSN print).

DOCUMENT TYPE:

Conference; (Meeting)

Conference; Abstract; (Meeting Abstract)

LANGUAGE:

English

ENTRY DATE:

Entered STN: 20 Aug 2003

Last Updated on STN: 18 Sep 2003

ΔR TanosTM is a new broad-spectrum fungicide from DuPont containing the active ingredients FamoxateTM (famoxadone) and cymoxanil. FamoxateTM inhibits energy production in plant pathogenic fungi and is highly active against spore germination and mycelial growth. TanosTM controls a wide range of tomato diseases such as early blight (Alternaria solani), late

blight (Phytophthora infestans), anthracnose (Colletotrichum coccodes), target spot (Corynespora cassicola, and leaf spot (Septoria lycopersici). TanosTM also improves control of bacterial spot (X. campestris pv. vesicatoria) and bacterial speck (P. syringae pv. tomato) when combined or alternated with copper or EBDC fungicides. Disease management programs that combine or alternate TanosTM with other appropriate fungicides are highly effective and reduce the risk of resistance development.

L68 ANSWER 3 OF 8 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN

ACCESSION NUMBER: 2003:383887 BIOSIS DOCUMENT NUMBER: PREV200300383887

TITLE: Potato disease control with a fungicide containing

famoxadone and cymoxanil.

AUTHOR(S): Shepherd, C. [Reprint Author]; McKinley, N. [Reprint

Author]; Harbour, J. [Reprint Author]; Holm, M. [Reprint Author]; Martin, M. [Reprint Author]; Ganske, D. [Reprint Author]; Kral, C. [Reprint Author]; Williams, R. [Reprint Author]

Author]; Rick, S. [Reprint Author]; Geddens, R.

[Reprint Author]

CORPORATE SOURCE: Stine-Haskell Research Center, DuPont Crop Protection, P.O.

Box 30, Newark, DE, 19714, USA

SOURCE: Phytopathology, (June 2003) Vol. 93, No. 6 Supplement, pp.

S78. print.

Meeting Info.: Annual Meeting of the American

Phytopathological Society. Charlotte, North Carolina, USA. August 09-13, 2003. American Phytopathological Society.

ISSN: 0031-949X (ISSN print).

DOCUMENT TYPE: Conference; (Meeting)

Conference; Abstract; (Meeting Abstract)

LANGUAGE: English

ENTRY DATE: Entered STN: 20 Aug 2003

Last Updated on STN: 18 Sep 2003

AB TanosTM, a mixture of FamoxateTM (famoxadone) and cymoxanil, is a new fungicide for U. S. potato growers. TanosTM controls both potato early blight (Alternaria solani) and late blight (Phytophthora infestans). It effectively controls strains of A. solani with reduced sensitivity to chlorothalonil and strains of P. infestans resistant to phenylamide fungicides. TanosTM has long-lasting preventive activity with outstanding washoff resistance. TanosTM also provides post-infection, local systemic control of late blight and excellent control of both foliar and stem blight. The wettable granule formulation is convenient and effective when applied by ground, air or chemigation equipment. TanosTM in combination or alternation with contact fungicides (EBDC's or chlorothalonil) increases the range of useful fungicide attributes and reduces the risk of resistance development.

L68 ANSWER 4 OF 8 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN

ACCESSION NUMBER: 2003:371816 BIOSIS DOCUMENT NUMBER: PREV200300371816

TITLE: Managing plant diseases of cucurbits with famoxadone-based

fungicides.

AUTHOR(S): Martin, M. [Reprint Author]; Shepherd, C. [Reprint Author];

Williams, R. [Reprint Author]; Rick, S. [Reprint Author];

Ganske, D. [Reprint Author]; Geddens, R. [Reprint

Authorl

CORPORATE SOURCE: Stine-Haskell Research Center, DuPont Crop Protection, P.O.

Box 30, Newark, DE, 19714, USA

SOURCE: Phytopathology, (June 2003) Vol. 93, No. 6 Supplement, pp.

S58. print.

Meeting Info.: Annual Meeting of the American

Phytopathological Society. Charlotte, North Carolina, USA. August 09-13, 2003. American Phytopathological Society.

ISSN: 0031-949X (ISSN print).

DOCUMENT TYPE:

Conference; (Meeting)

Conference; Abstract; (Meeting Abstract)

LANGUAGE:

English

ENTRY DATE:

Entered STN: 13 Aug 2003

Last Updated on STN: 18 Sep 2003

TanosTM is a new fungicide from DuPont containing the active ingredients FamoxateTM (famoxadone) and cymoxanil. FamoxateTM offers broad-spectrum disease control, low use rates, strong residual properties, and short pre-harvest intervals. FamoxateTM-based products control a wide range of economically important plant diseases in cucurbits such as downy mildew (Pseudoperonospora cubensis), anthracnose (Colletotrichum orbiculare) and Alternaria leaf blight (Alternaria cucumerina). FamoxateTM provides excellent activity against many other diseases caused by Oomycete and Ascomycete fungi, and improves control of some bacterial diseases when combined or alternated with copper or EBDC fungicides. Disease management programs containing FamoxateTM-based products in combination or alternating with a companion fungicide are effective, affordable and reduce the risk of resistance development.

L68 ANSWER 5 OF 8 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN

ACCESSION NUMBER: 1999:505917 BIOSIS DOCUMENT NUMBER: PREV199900505917 TITLE: Fungicidal mixtures.

AUTHOR (S):

Geddens, Ray M. [Inventor, Reprint author];

Martin, Marsha J. [Inventor]

CORPORATE SOURCE:

University of Delaware, Newark, DE, USA

ASSIGNEE: E. I. du Pont de Nemours and Company

PATENT INFORMATION: US 5948805 19990907

SOURCE:

Official Gazette of the United States Patent and Trademark Office Patents, (Sep. 7, 1999) Vol. 1226, No. 1. print.

CODEN: OGUPE7. ISSN: 0098-1133.

DOCUMENT TYPE:

Patent English

LANGUAGE: ENTRY DATE:

Entered STN: 3 Dec 1999

Last Updated on STN: 3 Dec 1999

L68 ANSWER 6 OF 8 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1997:187216 CAPLUS

DOCUMENT NUMBER:

126:182652

TITLE:

Synergistic fungicidal mixtures for plants

INVENTOR(S):

Geddens, Ray M.; Martin, Marsha J.

PATENT ASSIGNEE(S):

E. I. Du Pont de Nemours & Co., USA; Geddens, Ray M.;

Martin, Marsha J.

SOURCE:

PCT Int. Appl., 28 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT	NO.			KIN	D :	DATE		1	APPL:	ICAT	ION I	NO.		D	ATE	
WO 9702745				71 10070120			WO 1006 WG11246						10060703			
WU 970.	4/45			AI		19970130 WO 1996-US11346				19960/03						
W:	AL,	AM,	ΑU,	ΑZ,	BB,	BG,	BR,	BY,	CA,	CN,	CZ,	EE,	GE,	HU,	IL,	IS,
	JP,	KG,	ΚP,	KR,	ΚZ,	LK,	LR,	LT,	LV,	MD,	MG,	MK,	MN,	MX,	NO,	ΝZ,
	PL,	RO,	RU,	SG,	SI,	SK,	TJ,	TM,	TR,	TT,	UA,	US,	UZ,	VN,	AM,	AZ,
	BY,	KG														

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RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR,
             IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML,
             MR, NE, SN, TD, TG
    AU 9664535
                          A1
                                19970210
                                            AU 1996-64535
                                                                    19960703
    EP 841851
                          A1
                                19980520
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    EP 841851
                          B1
                                20011024
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             IE, FI
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                                19981007
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    BR 9609565
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    RU 2176450
                          C2
                                20011210
                                            RU 1998-102395
                                                                    19960703
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                         Т3
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                                                                    19960710
     US 5948805
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                                19990907
                                            US 1998-981999
                                                                    19980109
PRIORITY APPLN. INFO.:
                                            US 1995-1088P
                                                                 P
                                                                   19950712
                                            WO 1996-US11346
                                                                W 19960703
```

AB The title mixts. comprise 5-methyl-5-(4-phenoxyphenyl)-3-phenylamino-2,4-oxazolidinone and cymoxanil, or their salts. The composition is especially suitable

for control of Phytophthora infestans and Plasmopara viticola.

L68 ANSWER 7 OF 8 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN

DUPLICATE 1

ACCESSION NUMBER: 1991:9055 BIOSIS

DOCUMENT NUMBER: PREV199191009055; BA91:9055

TITLE: EFFECT OF HERBICIDES ON TAKE-ALL DISEASE

GAEUMANNOMYCES-GRAMINIS IN WINTER WHEAT TRITICUM-AESTIVUM.

AUTHOR(S): GEDDENS R M [Reprint author]; APPLEBY A P;

POWELSON R L

CORPORATE SOURCE: EI DUPONT DE NEMOURS CO INC, AGRIC PROD DEP, STINE-HASKELL

SITE, PO BOX 30, NEWARK, DEL 19711, USA

SOURCE: Weed Technology, (1990) Vol. 4, No. 3, pp. 478-481.

CODEN: WETEE9. ISSN: 0890-037X.

DOCUMENT TYPE: Article FILE SEGMENT: BA LANGUAGE: ENGLISH

ENTRY DATE: Entered STN: 8 Dec 1990

Last Updated on STN: 9 Dec 1990

AB Experiments were conducted in each of two seasons to determine possible effects of diclofop, difenzoquat, dinoseb, and mecoprop on the incidence of take-all disease and grain yield of winter wheat. All of the herbicides, especially mecoprop, reduced incidence of take-all. Treatments increased grain yields the first year but not the second, compared to the inoculated weed-free control. None of the herbicides tested increased incidence or severity of take-all disease in either of the two seasons. The technique of inoculating disease-free soil was successful in obtaining uniform and reproducible incidence of disease.

L68 ANSWER 8 OF 8 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1986:474302 CAPLUS

DOCUMENT NUMBER: 105:74302

TITLE: Postemergence herbicides and take-all disease in

winter wheat: alterations in the incidence and

severity of disease and crop growth

AUTHOR(S): Geddens, Ray Michael

```
CORPORATE SOURCE:
                         Oregon State Univ., Corvallis, OR, USA
SOURCE:
                         (1986) 128 pp. Avail.: Univ. Microfilms Int., Order
                         No. DA8527780
                         From: Diss. Abstr. Int. B 1986, 46(10), 3292-3
DOCUMENT TYPE:
                         Dissertation
LANGUAGE:
                         English
AB
    Unavailable
=> dis his ful
     (FILE 'HOME' ENTERED AT 16:38:00 ON 30 AUG 2005)
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L1
                D IDE CAN
                E PYRIDINE/CN 5
L2
              1 SEA ABB=ON PLU=ON PYRIDINE/CN
                D IDE CAN
L3
                STR
L4
            50 SEA SSS SAM L3
L5
           3793 SEA SSS FUL L3
L6
                STR L3
L7
                STR L6
L8
                STR L7
Ь9
                STR L8
             O SEA SSS SAM L9 OR L8 OR L7 OR L6
L10
L11
             14 SEA SSS FUL L9 OR L8 OR L7 OR L6
L12
                STR L3
L13
                STR L12
L14
                STR L13
L15
             1 SEA SSS SAM L14 OR L13 OR L12
L16
             18 SEA SSS FUL L14 OR L13 OR L12
                D L5 QUE STAT
                D L11 QUE STAT
                D L16 QUE STAT
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              O SEA ABB=ON PLU=ON L5 OR L11 OR L16
L17
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L18
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L19
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L20
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L21
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L22
                OR POWDER MILDEW? OR BC1 COMPLEX OR FUNGAL MITOCHRONDRIAL OR
                STEROL BIOSYNTHES?)
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L23
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                STEROL BIOSYNTHES?)
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L24
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                STEROL BIOSYNTHES?)
L25
             17 SEA ABB=ON PLU=ON L20 AND (FUNGICID? OR CONTROL? (L) MILDEW?
                OR POWDER MILDEW? OR BC1 COMPLEX OR FUNGAL MITOCHRONDRIAL OR
                STEROL BIOSYNTHES?)
     TOTAL FOR ALL FILES
             17 SEA ABB=ON PLU=ON L21 AND (FUNGICID? OR CONTROL?(L) MILDEW?
L26
                OR POWDER MILDEW? OR BC1 COMPLEX OR FUNGAL MITOCHRONDRIAL OR
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STEROL BIOSYNTHES?)
                D 1-17 IBIB ABS HITSTR
L27
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                SE ENZYME)
L28
              O SEA ABB=ON PLU=ON L18 AND (FUNGAL PLANT PATHOGEN OR DEMETHYLA
                SE ENZYME)
L29
              O SEA ABB=ON PLU=ON L19 AND (FUNGAL PLANT PATHOGEN OR DEMETHYLA
                SE ENZYME)
L30
              1 SEA ABB=ON PLU=ON L20 AND (FUNGAL PLANT PATHOGEN OR DEMETHYLA
                SE ENZYME)
     TOTAL FOR ALL FILES
L31
              1 SEA ABB=ON PLU=ON L21 AND (FUNGAL PLANT PATHOGEN OR DEMETHYLA
                SE ENZYME)
                D IBIB ABS HITSTR
L32
              0 SEA ABB=ON PLU=ON ERYSIPHE GRAMINIS AND L17
L33
              O SEA ABB=ON PLU=ON ERYSIPHE GRAMINIS AND L18
L34
              O SEA ABB=ON PLU=ON ERYSIPHE GRAMINIS AND L19
L35
              1 SEA ABB=ON PLU=ON ERYSIPHE GRAMINIS AND L20
     TOTAL FOR ALL FILES
L36
              1 SEA ABB=ON PLU=ON ERYSIPHE GRAMINIS AND L21
     FILE 'REGISTRY' ENTERED AT 16:48:45 ON 30 AUG 2005
L37
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L38
             22 SEA SSS SAM L37
L39
            418 SEA SSS FUL L37
L40
                STR L37
L41
              8 SEA SSS SAM L40
L42
            123 SEA SSS FUL L40
                D L39 QUE STAT
                D L42 QUE STAT
     FILE 'MEDLINE, BIOSIS, EMBASE, CAPLUS' ENTERED AT 16:51:24 ON 30 AUG 2005
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L43
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L44
             78 SEA ABB=ON PLU=ON L39 OR L42
L45
L46
           1178 SEA ABB=ON PLU=ON L39 OR L42
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L47
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L48
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                OR POWDER MILDEW? OR BC1 COMPLEX OR FUNGAL MITOCHRONDRIAL OR
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                GRAMINIS)
L49
             54 SEA ABB=ON PLU=ON L44 AND (FUNGICID? OR CONTROL? (L) MILDEW?
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                GRAMINIS)
L50
             15 SEA ABB=ON PLU=ON L45 AND (FUNGICID? OR CONTROL? (L) MILDEW?
                OR POWDER MILDEW? OR BC1 COMPLEX OR FUNGAL MITOCHRONDRIAL OR
                STEROL BIOSYNTHES? OR FUNGAL PLANT PATHOGEN OR ERYSIPHE
                GRAMINIS)
L51
            422 SEA ABB=ON PLU=ON L46 AND (FUNGICID? OR CONTROL?(L)MILDEW?
                OR POWDER MILDEW? OR BC1 COMPLEX OR FUNGAL MITOCHRONDRIAL OR
                STEROL BIOSYNTHES? OR FUNGAL PLANT PATHOGEN OR ERYSIPHE
                GRAMINIS)
     TOTAL FOR ALL FILES
L52
            491 SEA ABB=ON PLU=ON L47 AND (FUNGICID? OR CONTROL?(L) MILDEW?
                OR POWDER MILDEW? OR BC1 COMPLEX OR FUNGAL MITOCHRONDRIAL OR
                STEROL BIOSYNTHES? OR FUNGAL PLANT PATHOGEN OR ERYSIPHE
                GRAMINIS)
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L53 L54 L55 L56	0 SEA ABB=ON PLU=ON L5 AND DEMETHYLASE ENZYME
	TOTAL FOR ALL FILES
L57	0 SEA ABB=ON PLU=ON L5 AND DEMETHYLASE ENZYME
L58	O SEA ABB=ON PLU=ON L43 AND (FUNGICID? OR CONTROL? (L) MILDEW?
	OR POWDER MILDEW?) AND (BC1 COMPLEX OR FUNGAL MITOCHRONDRIAL
	OR STEROL BIOSYNTHES? OR FUNGAL PLANT PATHOGEN OR ERYSIPHE
	GRAMINIS)
L5 <sub>.</sub> 9	O SEA ABB=ON PLU=ON L44 AND (FUNGICID? OR CONTROL? (L) MILDEW?
	OR POWDER MILDEW?) AND (BC1 COMPLEX OR FUNGAL MITOCHRONDRIAL
	OR STEROL BIOSYNTHES? OR FUNGAL PLANT PATHOGEN OR ERYSIPHE
	GRAMINIS)
L60	0 SEA ABB=ON PLU=ON L45 AND (FUNGICID? OR CONTROL? (L) MILDEW?
	OR POWDER MILDEW?) AND (BC1 COMPLEX OR FUNGAL MITOCHRONDRIAL
	OR STEROL BIOSYNTHES? OR FUNGAL PLANT PATHOGEN OR ERYSIPHE
	GRAMINIS)
L61	18 SEA ABB=ON PLU=ON L46 AND (FUNGICID? OR CONTROL? (L) MILDEW?
	OR POWDER MILDEW?) AND (BC1 COMPLEX OR FUNGAL MITOCHRONDRIAL OR STEROL BIOSYNTHES? OR FUNGAL PLANT PATHOGEN OR ERYSIPHE
	GRAMINIS)
	TOTAL FOR ALL FILES
L62	18 SEA ABB=ON PLU=ON L47 AND (FUNGICID? OR CONTROL?(L) MILDEW?
	OR POWDER MILDEW?) AND (BC1 COMPLEX OR FUNGAL MITOCHRONDRIAL
	OR STEROL BIOSYNTHES? OR FUNGAL PLANT PATHOGEN OR ERYSIPHE
	GRAMINIS)
	D 1-18 IBIB ABS
L63	O SEA ABB=ON PLU=ON GEDDENS R?/AU
L64	5 SEA ABB=ON PLU=ON GEDDENS R?/AU
L65	O SEA ABB=ON PLU=ON GEDDENS R?/AU
L66	4 SEA ABB=ON PLU=ON GEDDENS R?/AU
	TOTAL FOR ALL FILES
L67	9 SEA ABB=ON PLU=ON GEDDENS R?/AU
L68	8 DUP REM L67 (1 DUPLICATE REMOVED)
	D 1-8 IBIB ABS

## FILE HOME

# FILE REGISTRY

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 29 AUG 2005 HIGHEST RN 862072-85-3 DICTIONARY FILE UPDATES: 29 AUG 2005 HIGHEST RN 862072-85-3

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2005

Please note that search-term pricing does apply when conducting SmartSELECT searches.

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

- \* The CA roles and document type information have been removed from \*
- \* the IDE default display format and the ED field has been added,
- \* effective March 20, 2005. A new display format, IDERL, is now \* available and contains the CA role and document type information. \*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Structure search iteration limits have been increased. See HELP SLIMITS for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at: http://www.cas.org/ONLINE/DBSS/registryss.html

#### FILE MEDLINE

FILE LAST UPDATED: 27 AUG 2005 (20050827/UP). FILE COVERS 1950 TO DATE.

On December 19, 2004, the 2005 MeSH terms were loaded.

The MEDLINE reload for 2005 is now available. For details enter HELP RLOAD at an arrow promt (=>). See also:

http://www.nlm.nih.gov/mesh/ http://www.nlm.nih.gov/pubs/techbull/nd04/nd04 mesh.html

OLDMEDLINE now back to 1950.

MEDLINE thesauri in the /CN, /CT, and /MN fields incorporate the MeSH 2005 vocabulary.

This file contains CAS Registry Numbers for easy and accurate substance identification.

### FILE BIOSIS

FILE COVERS 1969 TO DATE.

CAS REGISTRY NUMBERS AND CHEMICAL NAMES (CNs) PRESENT FROM JANUARY 1969 TO DATE.

RECORDS LAST ADDED: 25 August 2005 (20050825/ED)

FILE RELOADED: 19 October 2003.

#### FILE EMBASE

FILE COVERS 1974 TO 25 Aug 2005 (20050825/ED)

EMBASE has been reloaded. Enter HELP RLOAD for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

## FILE CAPLUS

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FILE COVERS 1907 - 30 Aug 2005 VOL 143 ISS 10

FILE LAST UPDATED: 29 Aug 2005 (20050829/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 173 and fuse? pyrimidinone?

L74 0 FILE MEDLINE L75 0 FILE BIOSIS L76 0 FILE EMBASE L77 0 FILE CAPLUS

TOTAL FOR ALL FILES

L78 0 L73 AND FUSE? PYRIMIDINONE?

TOTAL FOR ALL FILES

L83 0 L73 AND ?PYRIMIDINONE?

TOTAL FOR ALL FILES

L88 4 L73 AND POWDER? MILDEW

=> dup rem 188

PROCESSING COMPLETED FOR L88

L89 4 DUP REM L88 (0 DUPLICATES REMOVED)

=> d 1-4 ibib abs

L89 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

1981:97810 CAPLUS

DOCUMENT NUMBER:

94:97810

TITLE:

Combining the application of fungicides and

herbicides in spring-sown barley

AUTHOR (S):

Veverka, Karel

CORPORATE SOURCE:

Vyzk. Ustavy Rostlinne Vyroby, Ustav Ochrany Rostlin,

Prague-Ruzyne, Czech.

SOURCE:

Tagungsbericht - Akademie der

Landwirtschaftswissenschaften der Deutschen Demokratischen Republik (1980), 181, 169-73

Prepared by: Mary Hale @2-2507 Rem Bldg 1D86

CODEN: TALDA3; ISSN: 0138-2659

DOCUMENT TYPE: Journal LANGUAGE: German

Trimorfamid [60029-23-4] (1-8 L/ha) controlled powdery AB

mildew in spring barley. Tank mixes with Aminex [2039-46-5],

Aniten Combi (Aminex-flurenol-dicambda mixture) [53028-33-4], Faneron [13181-17-4], Mecoprop [7085-19-0], VUAgT 211 (Aminex-Benzazolin-(MPP mixture) [75022-31-0], and VUAqT216 (Aminex-Benazolin-DP mixture)

[75022-32-1] decreased the activity of Trimorfamid. Aretit

2813-95-8] (4 L/ha) decreased powdery mildew

incidence, and enhanced the activity of 1 L Trimorfamid/ha.

L89 ANSWER 2 OF 4 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN

ACCESSION NUMBER: 1980:281380 BIOSIS

DOCUMENT NUMBER: PREV198070073876; BA70:73876

THE EFFECTIVENESS OF FUNGICIDES IN THE CONTROL OF TITLE:

> POWDERY MILDEW ON SPRING BARLEY IN APPLICATION TOGETHER WITH HERBICIDES.

AUTHOR(S): VEVERKA K [Reprint author]

CORPORATE SOURCE: VYZK USTAV ROSTL VYROBY, 161 06 PRAHA-RUZYNE, CZECH

SOURCE: Sbornik UVTI (Ustav Vedeckotechnickych Informaci) Ochrana

Rostlin, (1979) Vol. 15, No. 4, pp. 287-294.

DOCUMENT TYPE: Article FILE SEGMENT: BΑ LANGUAGE: CZECH

AB Growth herbicides, particularly Aniten C and Bandex, increased

the occurrence of powdery mildew, whereas Aretit

reduced the infection. In joint application with contact and growth

herbicides, the effectiveness of the fungicides was worse than

when the fungicides were applied alone, the effectiveness of Calixin being

decreased less than that of the Milgo fungicide. The decrease in

effectiveness was less pronounced in the combinations with herbicides containing only MCPA [2-methyl-4-chlorophenoxy acetic acid] or mecoprop, in comparison with the combinations with herbicides which contained more active components. Fungicides increased the yield by 7.4-13.9%. In 1976, all herbicides and herbicide-fungicide mixtures increased the yield, in comparison

with the control, but in none of the herbicide-fungicide combinations was the yield higher than in the herbicide applied In 1977, neither herbicides nor their mixtures with

fungicides increased the yields; a statistically significant increase was obtained only in the variants of treatment with Milgo or Calixin applied alone. Due to a high phytotoxicity and low effectiveness in powdery mildew control, fungicide mixtures with Aretit

or Faneron are unsuitable for use. The application of fungicides in mixtures with growth herbicides should be regarded just as an extraordinary measure, justified only in case of an early occurrence of

powdery mildew; it cannot be recommended for general use.

91:135524

L89 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1979:535524 CAPLUS

DOCUMENT NUMBER: TITLE: Side effects of herbicidal urea and triazine

derivatives on wheat infested with Erysiphe graminis

f. sp. tritici. I. Herbicidal effects on

the infestation by powdery mildew

and yield of wheat

Ibenthal, W. D.; Heitefuss, R. AUTHOR(S):

CORPORATE SOURCE: Inst. Pflanzenpathol. Pflanzenschutz, Georg-August-Univ., Goettingen, Fed. Rep. Ger.

SOURCE: Phytopathologische Zeitschrift (1979), 95(2), 111-27

CODEN: PHYZA3; ISSN: 0031-9481

DOCUMENT TYPE: Journal LANGUAGE: German

The infestation of wheat with powdery mildew can be modified by the application of herbicidal urea- and triazine derivs. such as Aniten S [8074-23-5], Aretit [2813-95-8], Avenge [43222-48-6], and Dicuran [15545-48-9]. Germination of conidiospores as well as growth of germ tubes of the fungus were inhibited, and a reduced number of colonies were observed after application of practical doses of the herbicides on the leaf surface of the hosts. These inhibitions of fungus growth presumably resulted from direct fungicidal effects of the applied herbicides. The inhibition effects were especially conspecious for Tribunil [18691-97-9]. When the herbicides were applied to roots of the wheat with concns. below those of the fungicidal doses, a reduced degree of mildew infestation and sporulation were observed in the period immediately following the application (shock phase). Later, however, a stimulation of infestation as well as sporulation of the fungus was found during the so-called recovery phase on treated plants. In field trials, the yield of spring wheat was increased by the herbicides only if simultaneously mildew is controlled with fungicides. No increase of yield was observed, when the herbicides were applied without fungicide. The eradication of weeds by the herbicides, which should pos. affect the yield, was negated in that case by the stimulatory effects of these herbicides on the infestation and sporulation of the fungus during

L89 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1977:497267 CAPLUS

DOCUMENT NUMBER: 87:97267

the recovery phase.

TITLE: Effects of post-emergence herbicides on

powdery mildew of wheat

AUTHOR(S):

Rapparini, Gabriele

CORPORATE SOURCE: Cent. Studi Antiparassitari, CNR, Bologna, Italy SOURCE: Informatore Fitopatologico (1977), 27(2), 9-10

CODEN: INFTAP; ISSN: 0020-0735

DOCUMENT TYPE: Journal LANGUAGE: Italian

AB Of 8 herbicides tested in pot expts., Dinoterb [1420-07-1], Dinoseb [88-85-7], DNOC [534-52-1] and ioxynil-CMPP K salt mixture [63797-12-6] were the most active in controlling powdery mildew caused by Erysiphe graminis in wheat. Dinoseb and DNOC

were phytotoxic to the wheat.

=> dis his ful

(FILE 'HOME' ENTERED AT 16:38:00 ON 30 AUG 2005)

FILE 'REGISTRY' ENTERED AT 16:38:10 ON 30 AUG 2005

E THIOPHENE/CN 5

L1 1 SEA ABB=ON PLU=ON THIOPHENE/CN

D IDE CAN

E PYRIDINE/CN 5

L2 1 SEA ABB=ON PLU=ON PYRIDINE/CN

D IDE CAN

L3 STR

L4 50 SEA SSS SAM L3

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Page 90
L5
           3793 SEA SSS FUL L3
L6
                STR L3
                STR L6
L7
                STR L7
L8
L9
                STR L8
L10
             O SEA SSS SAM L9 OR L8 OR L7 OR L6
             14 SEA SSS FUL L9 OR L8 OR L7 OR L6
L11
                STR L3
L12
                STR L12
L13
                STR L13
L14
L15
              1 SEA SSS SAM L14 OR L13 OR L12
             18 SEA SSS FUL L14 OR L13 OR L12
L16
                D L5 QUE STAT
                D L11 QUE STAT
                D L16 QUE STAT
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L17
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L18
L19
              6 SEA ABB=ON PLU=ON L5 OR L11 OR L16
            175 SEA ABB=ON PLU=ON L5 OR L11 OR L16
L20
     TOTAL FOR ALL FILES
            183 SEA ABB=ON PLU=ON L5 OR L11 OR L16
L21
              O SEA ABB=ON PLU=ON L17 AND (FUNGICID? OR CONTROL? (L) MILDEW?
L22
                OR POWDER MILDEW? OR BC1 COMPLEX OR FUNGAL MITOCHRONDRIAL OR
                STEROL BIOSYNTHES?)
L23
              O SEA ABB=ON PLU=ON L18 AND (FUNGICID? OR CONTROL?(L)MILDEW?
                OR POWDER MILDEW? OR BC1 COMPLEX OR FUNGAL MITOCHRONDRIAL OR
                STEROL BIOSYNTHES?)
L24
              O SEA ABB=ON PLU=ON L19 AND (FUNGICID? OR CONTROL?(L)MILDEW?
                OR POWDER MILDEW? OR BC1 COMPLEX OR FUNGAL MITOCHRONDRIAL OR
                STEROL BIOSYNTHES?)
L25
             17 SEA ABB=ON PLU=ON L20 AND (FUNGICID? OR CONTROL? (L) MILDEW?
                OR POWDER MILDEW? OR BC1 COMPLEX OR FUNGAL MITOCHRONDRIAL OR
                STEROL BIOSYNTHES?)
     TOTAL FOR ALL FILES
L26
             17 SEA ABB=ON PLU=ON L21 AND (FUNGICID? OR CONTROL?(L) MILDEW?
                OR POWDER MILDEW? OR BC1 COMPLEX OR FUNGAL MITOCHRONDRIAL OR
                STEROL BIOSYNTHES?)
                D 1-17 IBIB ABS HITSTR
L27
              O SEA ABB=ON PLU=ON L17 AND (FUNGAL PLANT PATHOGEN OR DEMETHYLA
                SE ENZYME)
L28
              O SEA ABB=ON PLU=ON L18 AND (FUNGAL PLANT PATHOGEN OR DEMETHYLA
                SE ENZYME)
L29
              0 SEA ABB=ON PLU=ON L19 AND (FUNGAL PLANT PATHOGEN OR DEMETHYLA
                SE ENZYME)
L30
              1 SEA ABB=ON PLU=ON L20 AND (FUNGAL PLANT PATHOGEN OR DEMETHYLA
                SE ENZYME)
     TOTAL FOR ALL FILES
              1 SEA ABB=ON PLU=ON L21 AND (FUNGAL PLANT PATHOGEN OR DEMETHYLA
L31
                SE ENZYME)
                D IBIB ABS HITSTR
L32
              O SEA ABB=ON PLU=ON ERYSIPHE GRAMINIS AND L17
L33
              O SEA ABB=ON PLU=ON ERYSIPHE GRAMINIS AND L18
L34
              O SEA ABB=ON PLU=ON ERYSIPHE GRAMINIS AND L19
L35
              1 SEA ABB=ON PLU=ON ERYSIPHE GRAMINIS AND L20
     TOTAL FOR ALL FILES
L36
              1 SEA ABB=ON PLU=ON ERYSIPHE GRAMINIS AND L21
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D

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FILE 'REGISTRY' ENTERED AT 16:48:45 ON 30 AUG 2005
L37
                STR
             22 SEA SSS SAM L37
L38
            418 SEA SSS FUL L37
L39
                STR L37
L40
              8 SEA SSS SAM L40
L41
L42
            123 SEA SSS FUL L40
                D L39 QUE STAT
                D L42 OUE STAT
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2 SEA ABB=ON PLU=ON L39 OR L42
191 SEA ABB=ON PLU=ON L39 OR L42
78 SEA ABB=ON PLU=ON L39 OR L42
L43
L44
L45
           1178 SEA ABB=ON PLU=ON L39 OR L42
L46
     TOTAL FOR ALL FILES
L47
           1449 SEA ABB=ON PLU=ON L39 OR L42
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L48
                OR POWDER MILDEW? OR BC1 COMPLEX OR FUNGAL MITOCHRONDRIAL OR
                 STEROL BIOSYNTHES? OR FUNGAL PLANT PATHOGEN OR ERYSIPHE
                 GRAMINIS)
L49
             54 SEA ABB=ON PLU=ON L44 AND (FUNGICID? OR CONTROL? (L) MILDEW?
                OR POWDER MILDEW? OR BC1 COMPLEX OR FUNGAL MITOCHRONDRIAL OR
                 STEROL BIOSYNTHES? OR FUNGAL PLANT PATHOGEN OR ERYSIPHE
             15 SEA ABB=ON PLU=ON L45 AND (FUNGICID? OR CONTROL? (L) MILDEW?
L50
                OR POWDER MILDEW? OR BC1 COMPLEX OR FUNGAL MITOCHRONDRIAL OR
                 STEROL BIOSYNTHES? OR FUNGAL PLANT PATHOGEN OR ERYSIPHE
                 GRAMINIS)
            422 SEA ABB=ON PLU=ON L46 AND (FUNGICID? OR CONTROL? (L) MILDEW?
L51
                 OR POWDER MILDEW? OR BC1 COMPLEX OR FUNGAL MITOCHRONDRIAL OR
                 STEROL BIOSYNTHES? OR FUNGAL PLANT PATHOGEN OR ERYSIPHE
                 GRAMINIS)
     TOTAL FOR ALL FILES
            491 SEA ABB=ON PLU=ON L47 AND (FUNGICID? OR CONTROL?(L) MILDEW?
L52
                 OR POWDER MILDEW? OR BC1 COMPLEX OR FUNGAL MITOCHRONDRIAL OR
                 STEROL BIOSYNTHES? OR FUNGAL PLANT PATHOGEN OR ERYSIPHE
                GRAMINIS)
              O SEA ABB=ON PLU=ON L5 AND DEMETHYLASE ENZYME
L53
              O SEA ABB=ON PLU=ON L5 AND DEMETHYLASE ENZYME
L54
              O SEA ABB=ON PLU=ON L5 AND DEMETHYLASE ENZYME
L55
              O SEA ABB=ON PLU=ON L5 AND DEMETHYLASE ENZYME
L56
     TOTAL FOR ALL FILES
L57
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              O SEA ABB=ON PLU=ON L43 AND (FUNGICID? OR CONTROL? (L) MILDEW?
L58
                 OR POWDER MILDEW?) AND (BC1 COMPLEX OR FUNGAL MITOCHRONDRIAL
                OR STEROL BIOSYNTHES? OR FUNGAL PLANT PATHOGEN OR ERYSIPHE
                GRAMINIS)
L59
              O SEA ABB=ON PLU=ON L44 AND (FUNGICID? OR CONTROL? (L) MILDEW?
                OR POWDER MILDEW?) AND (BC1 COMPLEX OR FUNGAL MITOCHRONDRIAL
                OR STEROL BIOSYNTHES? OR FUNGAL PLANT PATHOGEN OR ERYSIPHE
                GRAMINIS)
L60
              O SEA ABB=ON PLU=ON L45 AND (FUNGICID? OR CONTROL? (L) MILDEW?
                 OR POWDER MILDEW?) AND (BC1 COMPLEX OR FUNGAL MITOCHRONDRIAL
                 OR STEROL BIOSYNTHES? OR FUNGAL PLANT PATHOGEN OR ERYSIPHE
                GRAMINIS)
L61
             18 SEA ABB=ON PLU=ON L46 AND (FUNGICID? OR CONTROL? (L) MILDEW?
                OR POWDER MILDEW?) AND (BC1 COMPLEX OR FUNGAL MITOCHRONDRIAL
                 OR STEROL BIOSYNTHES? OR FUNGAL PLANT PATHOGEN OR ERYSIPHE
                 GRAMINIS)
```

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TOTAL FOR ALL FILES
L62
             18 SEA ABB=ON PLU=ON L47 AND (FUNGICID? OR CONTROL? (L) MILDEW?
                OR POWDER MILDEW?) AND (BC1 COMPLEX OR FUNGAL MITOCHRONDRIAL
                OR STEROL BIOSYNTHES? OR FUNGAL PLANT PATHOGEN OR ERYSIPHE
                GRAMINIS)
                D 1-18 IBIB ABS
L63
              O SEA ABB=ON PLU=ON GEDDENS R?/AU
L64
              5 SEA ABB=ON PLU=ON GEDDENS R?/AU
L65
              O SEA ABB=ON PLU=ON GEDDENS R?/AU
              4 SEA ABB=ON PLU=ON GEDDENS R?/AU
L66
     TOTAL FOR ALL FILES
L67
              9 SEA ABB=ON PLU=ON GEDDENS R?/AU
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L68
                D 1-8 IBIB ABS
L69
              1 SEA ABB=ON PLU=ON HERBIC? AND (L17 OR L39 OR L42)
L70
             69 SEA ABB=ON PLU=ON HERBIC? AND (L18 OR L39 OR L42)
L71
              3 SEA ABB=ON PLU=ON HERBIC? AND (L19 OR L39 OR L42)
L72
            341 SEA ABB=ON PLU=ON HERBIC? AND (L20 OR L39 OR L42)
     TOTAL FOR ALL FILES
L73
            414 SEA ABB=ON PLU=ON HERBIC? AND (L21 OR L39 OR L42)
              O SEA ABB=ON PLU=ON L69 AND FUSE? PYRIMIDINONE?
L74
L75
              O SEA ABB=ON PLU=ON L70 AND FUSE? PYRIMIDINONE?
L76
              O SEA ABB=ON PLU=ON L71 AND FUSE? PYRIMIDINONE?
              O SEA ABB=ON PLU=ON L72 AND FUSE? PYRIMIDINONE?
L77
     TOTAL FOR ALL FILES
L78
              O SEA ABB=ON PLU=ON L73 AND FUSE? PYRIMIDINONE?
L79
              O SEA ABB=ON PLU=ON L69 AND ?PYRIMIDINONE?
L80
              O SEA ABB=ON PLU=ON L70 AND ?PYRIMIDINONE?
L81
              O SEA ABB=ON PLU=ON L71 AND ?PYRIMIDINONE?
L82
              O SEA ABB=ON PLU=ON L72 AND ?PYRIMIDINONE?
     TOTAL FOR ALL FILES
              O SEA ABB=ON PLU=ON L73 AND ?PYRIMIDINONE?
L83
              O SEA ABB=ON PLU=ON L69 AND POWDER? MILDEW
L84
L85
              1 SEA ABB=ON PLU=ON L70 AND POWDER? MILDEW
L86
              O SEA ABB=ON PLU=ON L71 AND POWDER? MILDEW
              3 SEA ABB=ON PLU=ON L72 AND POWDER? MILDEW
L87
     TOTAL FOR ALL FILES
L88
              4 SEA ABB=ON PLU=ON L73 AND POWDER? MILDEW
L89
              4 DUP REM L88 (0 DUPLICATES REMOVED)
                D 1-4 IBIB ABS
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### FILE HOME

### FILE REGISTRY

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\*

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On December 19, 2004, the 2005 MeSH terms were loaded.

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http://www.nlm.nih.gov/mesh/ http://www.nlm.nih.gov/pubs/techbull/nd04/nd04 mesh.html

OLDMEDLINE now back to 1950.

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FILE BIOSIS

FILE COVERS 1969 TO DATE.

CAS REGISTRY NUMBERS AND CHEMICAL NAMES (CNs) PRESENT FROM JANUARY 1969 TO DATE.

RECORDS LAST ADDED: 25 August 2005 (20050825/ED)

FILE RELOADED: 19 October 2003.

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